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ABSTRACT

One of seven similar project reports dealing with program development in career education for teacher, counselor, and administrator preparation, this report presents, in two sections, information on infusing career education content into secondary teacher education programs. The first section describes the results of the work done by the Secondary Teacher Education Task Force. The information is grouped under the headings Desired Student Outcomes, Teaching/Learning Activities, Teacher Competencies, Career Education Information for Use in Teacher Education Programs, and Recommendations. The second section provides examples of eight secondary teacher education course syllabi which have been infused with career education elements. Appendixes contain the form used by different task forces in identifying, describing, and classifying career education elements; policy resolutions for career education; and career potentials for geography majors. For more information on the total project, see CE 009 305. (TA)

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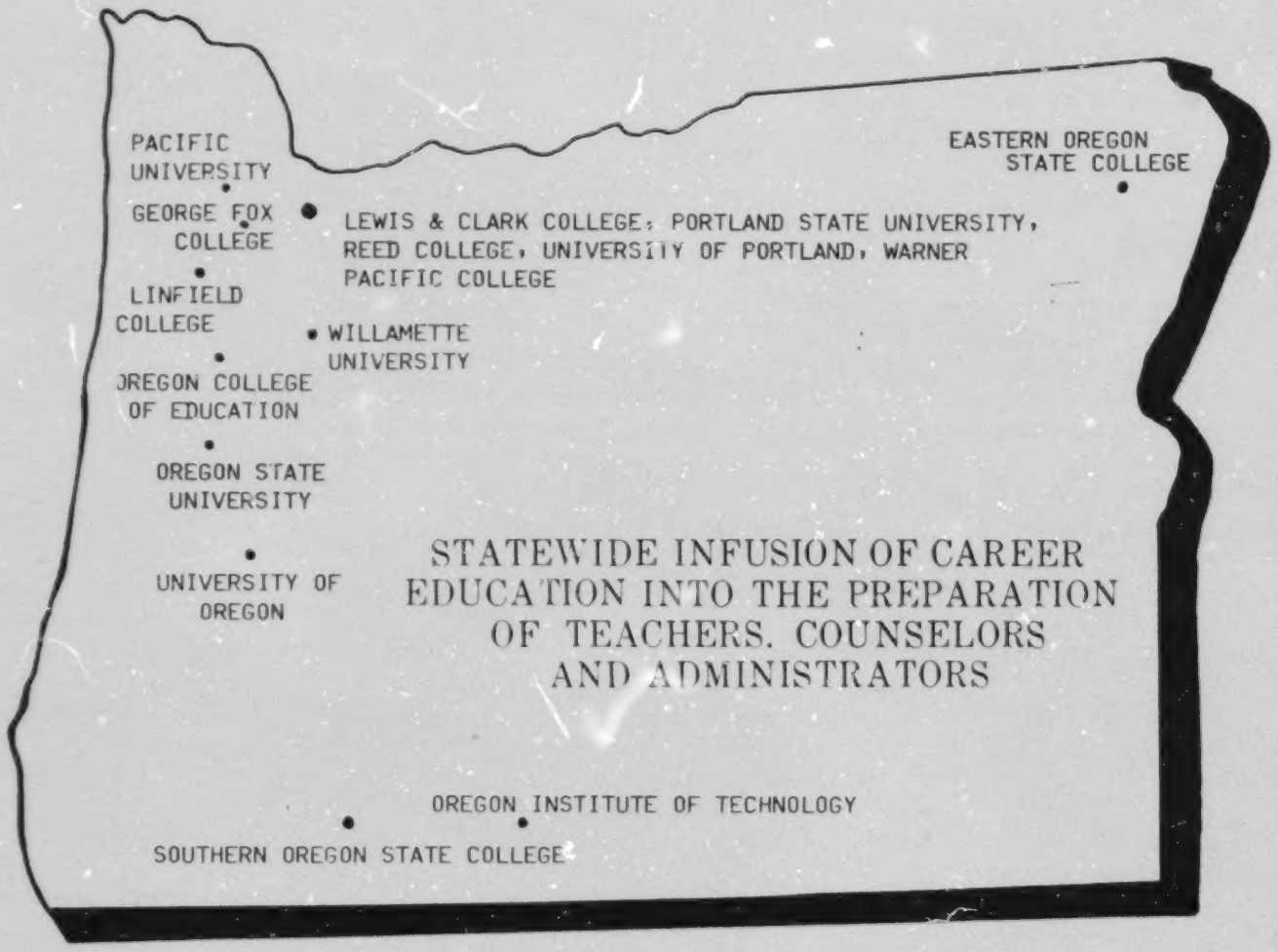
CAREER EDUCATION IN SECONDARY TEACHER EDUCATION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STATEWIDE INFUSION OF CAREER EDUCATION INTO THE PREPARATION OF TEACHERS, COUNSELORS AND ADMINISTRATORS
OREGON INSTITUTE OF TECHNOLOGY
SOUTHERN OREGON STATE COLLEGE

INTERINSTITUTIONAL CONSORTIUM FOR CAREER EDUCATION
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U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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THE INTERINSTITUTIONAL CONSORTIUM FOR CAREER EDUCATION

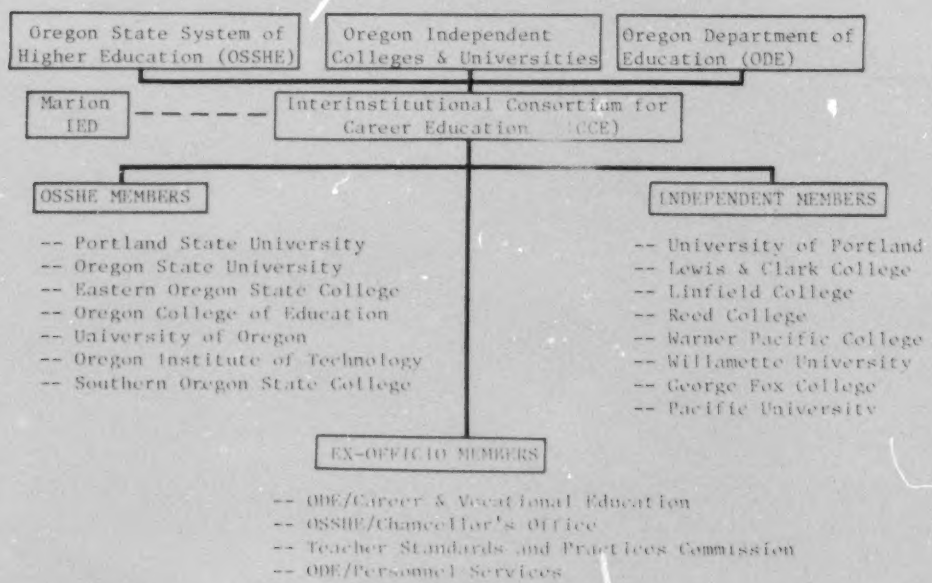
ORGANIZATION

The Interinstitutional Consortium for Career Education (ICCE) was formed in 1971 and is comprised of all Oregon institutions of higher education which prepare teachers, counselors and administrators. The endeavor is cooperatively sponsored by the Oregon Department of Education, the Oregon State System of Higher Education and the independent colleges and universities of Oregon. Staff is employed by the Marion Intermediate Education District (IED) to coordinate Consortium efforts and carry out Project activities.

PURPOSE

- Consortium activities are designed to facilitate Oregon college and university efforts to improve their preparation of educational personnel for roles in career education.
- The ICCE serves as a planning/coordinating body charged to study the needs for personnel development in career education and to promote necessary action to meet those needs.

STRUCTURE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-- ODE/Career & Vocational Education
-- OSSHE/Chancellor's Office
-- Teacher Standards and Practices Commission
-- ODE/Personnel Services

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The activity which is subject of this report was supported in part by the U.S. Office of Education, Department of Health, Education and Welfare and the Oregon Department of Education. However, the opinions expressed herein do not necessarily reflect the position or policy of either agency. No official U.S. Office of Education or Oregon Department of Education endorsement should be inferred.

PREFACE

The materials presented in this document has been developed through activities of the Interinstitutional Consortium for Career Education and within the jointly supported state and federal project, "Statewide Infusion of Career Education into the Preparation of Teachers, Counselors and Administrators". This comprehensive project is focused upon three essential aspects of preparing educational personnel for expanded and extended roles in career education. Those aspects are: staff development for college and university faculties, program development for teacher, counselor and administrator preparation, and teacher certification and program accreditation.

This document has resulted from work in the program development area and presents career education content for secondary teacher education curricula developed by the Project's Secondary Education Task Force. Also presented are the revised course syllabi which have been infused with career education elements. The course infusion work was done at Portland State University, Oregon State University & Oregon College of Education.

This report is one of eight similar reports dealing with program development in career education for teacher, counselor and administrator preparation. The other reports address Elementary Teacher Education, Special Education Personnel, Counselor Education, Vocational Education, Career Clusters Information, Community Resources Utilization and a Conceptual Model for the Career Education Dimension of College and University Personnel Preparation Programs. Although each report is complete in itself, the user of this report may find the others supportive in meeting a particular need.

Many individuals and agencies have contributed to the work of the total project. The program development aspects, in particular, have required the collaborative support of numerous individuals. Portland State University and Dr. Allen Lee, Director of Career Education, specifically deserve much of the credit for the accomplishment in program development. PSU was the major sub-contractor to the ICCE for this work and Dr. Lee provide the leadership and direction for those activities. The original report, was prepared on behalf of the Task Force by Dr. Ralph Smith and edited by Dr. Allen Lee, both of PSU. Further editing and final formatting was done by the ICCE central office staff. Both the task force members and individual professors who infused courses deserve our sincere appreciation and thanks. Those individuals are identified in the appropriate sections of this report.

The results of this initial effort to infuse career education concepts into teacher, counselor and administrator preparation in Oregon already are impacting upon Oregon educational personnel development programs. Further testing, evaluation and course/program infusion will take place during 1976-77& 1977-78. It is hoped that this and the companion reports will facilitate that effort and also be of assistance to colleges, universities and other agencies and institutions outside Oregon who wish to undertake similar efforts.

Darrell L. Ward, Director
Interinstitutional Consortium
for Career Education

INTRODUCTION

The potential of any educational reform movement is highly dependent on the attitudes, skills, and understandings of the educational personnel responsible for its implementation. As such, the maximum potential for career education can only be reached if its concepts, knowledges and skills are adequately infused into inservice and preservice preparation of teachers, counselors and administrators. Although many individuals, agencies and institutions have responsibility for personnel development, the institution which must provide the primary leadership and direction are those colleges and universities which prepare educational personnel for our schools.

The Interinstitutional Consortium for Career Education, established in 1974, seeks to facilitate the efforts of Oregon institutions who prepare teachers, counselors and administrators to better meet the needs of personnel preparation for career education. This fifteen member consortium devised and planned a change strategy for college and university personnel preparation which focuses upon three essential aspects of the personnel development: staff development for college and university faculty, program development for college and university preparatory programs, and teacher certification and program accreditation. The work reported in this document represents a portion of that change strategy in the area of program development. Materials included are those developed by a task force and those developed by faculty members of cooperating institutions who revised existing courses to include appropriate knowledge and skills in career education.

The conceptual design for this activity was that a group of knowledgeable people representing colleges and universities, local education institutions, the Oregon Department of Education, and the business, labor and industrial community would come together within the context of a given area of education, i.e., elementary education, and identify those concepts, student outcomes, teaching/learning activities, teaching competencies and body of information which would be important for inclusion in the preparation programs for individuals in the given area. Further, the strategy provided for colleges and universities to analyze their curricula in a given area and identify which concepts were currently being adequately covered in the preparatory programs, which concepts could be covered with slight modification of the curriculum and which concepts would have to be infused into the curriculum as new materials. Similar criteria were used for the analysis of courses at all institutions. Note Appendix I for the form used for this purpose.

Courses were then selected for revision. The criteria used by Portland State University for selecting elementary and secondary teacher education courses to infuse with elements of career education are examples of the thought that went into such decisions. These courses were selected for infusion efforts on the basis of the following criteria:

1. Courses selected represented a cross-section of the curricula areas found in public schools (Social Studies, Reading, Science, Language Arts, Physical Education).

2. Courses selected represented a cross-section of the key undergraduate experiences required for acquisition of a basic teaching certificate.

3. Graduate courses selected represented key courses required for acquisition of a standard teaching certificate as well as an elective portion of a Master's Degree program.

4. Courses selected were taught this academic year by instructors specifically interested and committed to the infusion of career education strands into departmental course offerings.

5. Courses selected were taught by faculty recognized as key personnel who provide leadership for program development.

Infused courses were tried out with students and syllabi again revised, based upon the pilot test.

In general the preceeding strategy has been used in developing the materials included in this report and has proven a very adequate model for causing programs and course syllabi to be infused with career education concepts at the college and university level.

However, as in any developmental effort, modification of the strategy had to be made to fit the day-to-day situation. Initial plan called for the task force to have completed its report early in the academic year -- in time for that report to be distributed to the colleges and universities faculty before the infusion of the courses began. Because of the time needed for the task force to adequately fulfill its responsibility and the need to pilot test the revised syllabi during 1975-76, the infusion process began before the task force work was completed. Faculty members directly involved with course infusion were for the most part also members of a task force and therefore did have the benefit of the initial task force findings. In addition to the basic content of the task force reports, the selected bibliographies proved extremely helpful in course and program revision.

The task force chairperson played a key role in organizing the task force and in the development of the report. The chairperson was assisted in each instance by a task force coordinator who had the specific responsibility of pulling together the task forces varied activities and materials and putting them into a cohesive document for review and examination by task force members. The task forces reviewed information from a variety of sources and met periodically to discuss their findings and to suggest what should be included in the career education content of secondary teacher education programs. Before finalizing that task force report a draft prepared by the coordinator was distributed to the task force members for their comments and additional input. Additionally, the Northwest Regional

Regional Educational Laboratory was contracted to critique the material and provided an analysis of its content. The Northwest Lab provided sources of additional material which could strengthen the task force document. Subsequently, much of this material was included in the task force reports.

This reports should prove useful to college and universities desiring to include career education as a part of their secondary education program. The information from the task force can provide concepts and content to be considered. The examples of required course syllabi used to infuse this information can demonstrate a process that is possible to help accomplish an essential task.

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CAREER EDUCATION CONTENT FOR SECONDARY TEACHER EDUCATION PROGRAMS

The material included here is a result of the work done by a Task Force whose purpose was to identify, collect, review and organize a body of careeer education information for consideration by colleges and universities having responsibility for the preparation of secondary teachers.

TASK FORCE MEMBERSHIP

Persons from various colleges and universities, local school districts and the State Department of Education served on the Secondary Teacher education Task Force. Their contribution to the Project in truly appreciated.

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CAREER EDUCATION CONTENT FOR SECONDARY TEACHER EDUCATION PROGRAMS

In order to put the content of this document in the proper perspective, it is necessary to clarify definitions and concepts of career education. The traditional issues seem to fall into two categories:

1. What is the presently understood relationship between career education and vocational education?

2. To what extent must career education focus upon preparing students for productive work and earning a living?

The first question stems from the long dominance of vocational education which not only has produced a large body of knowledge about vocational selection and preparation, but it has also provided for broad career planning in the absence of other systematic career education. As a result, typical vocational terms such as "jobs" tend to slip into the literature of career education with only passing consideration for "occupations," "professions," or "positions," and usually there is little or no reference to careers without vocational orientation. It seems clear that career education should be broadly conceived, but it has not been clear to everyone that career education is not intended to supplant traditional vocational education. The matter has been deemed of sufficient important for the Vocational Education Association to issue policy statements regarding the relationship between the two areas. Attention is called to these statements in Appendix II.

The issue posed in the second question is more difficult to resolve since it involves value judgments and philosophical considerations. There is still a strong societal predisposition to emphasize the work ethic. This ethic usually emphasizes work for its own sake, but it does not exclude a consideration of work as a means to an end, that is, as necessary for earning a living. In conflict with the work ethic is an almost equally strong societal predisposition to place emphasis upon leisure. Indeed, the division of emphasis has been shifting more and more toward leisure with at least a passing interest in some educational circles for more education in how to use leisure "productively."

A working definition of career and career education needs to be stated in terms broad enough to allow differing emphasis and differing interpretations. The following definitions of "career" is such a definition:

> "A career is that field of endeavor to which a person devotes major interest and attention for most of all of a lifetime, usually but not necessarily for the purpose of earning a livelihood."

Career education can be identified as an ongoing process rather than a specific outcome. Hence, any instructional elements in any instructional area from kindergarten through the university can contribute to learning more about options from which one may choose a "field or fields of endeavor." General education provides the broad yet basic background for all learning. As students gain general knowledge about the world including the world of work, they also need basic skills in language arts, computing, and analyzing. Further they need to develop insight into compemporary scientific and technological processes, and they need to know how to maintain mental and physical health. Most important in the changing world of knowledge and work is the ability to learn, i.e., learn how to learn and remain a life-long learner. Career education as such can provide learning experiences needed to make effective career choices and to develop the attitudes, knowledges and skills that enable persons to perform successfully in the producer (occupational) roles and to assist them in other related life roles.

Although knowledge and skills are pre-eminent in career education, there is an <u>implicit</u> value judgment underlying the need that is seen for more knowledge and skills in this area. It is judged to be more important to have the opportunity to choose from among alternatives on the basis of career information than merely to <u>drift</u> into a "field of endeavor." This drift may include selecting a field because of parental orientation, or because of desire to follow an idol encountered in high school, the entertainment world, sports world, or other public area.

This then is the framework within which the material in this report is written.

Desired Student Outcomes 7-12

1. Students should be able to assess realistically their abilities, preferences, and limitations in relation to selves and others.

2. They should be able to develop increasing awareness of career opportunities with opportunity to explore them.

3. They should be able to relate their abilities and limitations to life roles and career goals.

4. They should be able to choose intelligently from among alternatives.

5. They should have entry-level skills for chosen careers.

These outcomes have no priorities in the sense of any of them being considered more important than others, but they are listed in the order that they logically follow one another. Before preceeding with an identification of instructional approaches that may achieve these outcomes, it is well to illustrate how these outcomes would apply in practice.

1. Students should be able to assess realistically their abilities, preferences, and limitations in relation to selves and others.

This means that students will have a reasonably clear picture of themselves by the time they complete their high-school experience. They should know the extent of their abilities or skills in areas such as music, speaking, writing, listening, computing, drawing, painting, constructing, and other areas in which there are normally opportunities for secondary-school experience. In addition there should be knowledge of mechancial aptitude, physical and athletic abilities, stamina, aesthetic propensities, and other characteristics of this nature.

There should be consideration given to philosphical orientation without intruding upon a student's private beliefs. Knowledge of these abilities can be obtained with checklists or instruments now available or instruments can be constructed, sometimes by the students themselves. Students can assess their own characteristics, check them against a peer group assessment, and check both with an assessment from a teacher, counselor, or parent. There are also instruments to draw out preferences and feelings. Once students have begun to get a clear picture of where they stand in relation to themselves and others, they are ready for 2.

2. Students should be able to develop increasing awareness of career opportunities with opportunity to explore them.

This step is only a transition from 1 to 3, but often is seems that it is the main goal of career education. It is true that it is the sine qua non of the curriculum, but its function should be recognized as only a means to an end and not as an end in itself. It is assumed that as students are assessing their abilities and limitations, they will be looking at career opportunities in order to learn more about the skills, knowledges and attitudes related to each of many areas. Only as they become increasingly aware of the characteristics of several careers are they then able to move to outcome 3 and relate them to life styles or life roles.

3. Students should be able to relate their abilities and limitations to life roles and career goals.

Students will not be able to do this without gaining knowledge about available life opportunities. Career education must include life roles. Life styles accompany life roles. Present-day society provides many and varied life styles, but they usually have a nucleus of similar roles. These roles in broad terms include the role of consumer, the role of citizen of both state and nation, the role of family member, the role of producer of goods and services and the role of the person, i.e., what one is without regard to culture, nation, state or economic system. A systematic study of alternative life styles and related career goals will enable a student to relate the awareness achieved in the first two outcomes to available opportunities. Thus a person lacking stong musical ability and the willingness to devote what may become tedious hours of practice, should be able to see that becoming a musical virtuoso is a

remote possibility. However, the life style of the musician may appeal to a student, and it may be possible to find a career that approximates that life style but more nearly suits a student's abilities. Students should look to their likes and dislikes in relation to environment, working with other people or working alone, desire for family life, desire to travel, the need for financial remuneration, the degree of independence desired, and many other factors. Much of what is needed for a student to make these assessments is already found in the areas of geography, sociology, home economics, histroy, business education, economics, and other subjects which students are already studying in high school. What is too often lacking is an awareness of the connections or relationships between what one is normally studying and the selection of life roles and careers. Hence a large task of career education is to bring these connections or relationships to the fore. A later section of this report will point up career education possibilities of various disciplines and relate the subjects taught at the seven through twelve grade levels to college and university disciplines.

The fourth student outcome follows from the awareness and exploration that should result from the first three.

4. Students should be able to choose intelligently from among alternatives.

This outcome perhaps more than any other opposes the drift tendency. In the latter years of the secondary-school experience, students approach decision-making time. During this period students should not be forced into making premature decisions, but should have the opportunity to think reflectively about making decisions. If a student's abilities and preferences indicate that either law or medicine are possibilities, then the decision is made by weighing carefully the alternative life styles associated with each field, the conditions under which one works, the remuneration, the associations which one develops, and all else that has been developed in the first two outcomes. It follows that the decision is not made <u>solely</u> because an adult idol is a physician or an attorney, although this is a factor that the young person can take into account. There is nothing intrinsically the matter with following in the footsteps of another provided that there are accompanying abilities and preferences for the life style and career of the mentor.

Finally, it follows that much can be accomplished from the seventh through the twelfth grades to reach the goal in outcome 5.

5. Students should have entry-level skills for chosen careers.

This means that as decision-making approaches, there will be developing a modicum of skills for starting a career. This may mean quite specific preparation which comes within the purview of Vocational Education. Shorthand, typing, filing and other clerical skills can and are being taught in secondary schools. These are probably typical of the entry-level skills that may be rather highly developed at these grade levels. However, other entry-level skills may be more vague such as those required for the professions which in turn require considerable post-secondary study.

Hence entry-level skills may literally be those needed to enter the university. Also, studies in the humanities, social sciences, and sciences may be the best entry-level preparation for innumerable careers from clergyman to governmental official. It is important that entry-level skills not be narrowly construed to mean that students will be able to perform specific tasks unless there is indication that these tasks are or will be related to the process of decision-making the student is undergoing.

Teaching-Learning Activities

This portion of the report must now be concerned with instructional approaches to achieve the outcomes. At this point there must be a divergence toward the approaches needed in teacher education. In order to accomplish this divergence, it is first necessary to identify teaching-learning activities which have been developed or are being developed for grade levels seven through twelve. Some of these will be suitable for us in teacher education classes at least as walk-through experiences in order to test their efficacy as classroom tools. It follows also that herein lies much of the body of knowledge needed by potential classroom teachers. The outline of activities is the same as the student outcomes analyzed above. Many teaching-learning activities for all grade levels are described in guides noted elsewhere in this report, therefore this narrative portion will refer only to instructional approaches that seem most appropriate for each type of outcome.

1. Student assessment of abilities, preferences, and limitations.

Reference has already been made to the use of checklist instruments and similar devices for self, peer, and mentor evaluation (see student outcome #1), but there are other approaches suitable. As we will be looking later at specific subject areas in relation to career education, it is pertinent to note possible variations in the instructional approach in relation to these areas. For example, checklist instruments might be suitable for sociology or pshchology classes but similar evaluations can be treated in narrative form in an English or writing class. A simple essay topic on what one most likes to do and what one least likes to do will develop preferences. Reading essays to each other in small groups with opportunity for discussion will allow for comparisons with each other. This is a common topic among young people anyway so it needs mainly to be triggered and focused. Another device is the use of the "autobiography" which may yield information on several outcomes. Writing a short story often reveals more about the writer than it does characters in the story. Comparing oneself to characters in literature may yield information on one's abilities, e.g. "Do you feel that you could be Roy Hobbs?" Not only abilities to do particular tasks would have to be considered, but also the willingness to face certain value choices would have to be considered. A conpendium of Themes in American Literature (McFarland and others, Houghton-Mifflin, 1974) can guide a teacher to many opportunities for finding topics suitable for reaching the first outcome.

2. The development of increasing awareness of career opportunities with opportunity to explore them.

This is the area in which students will find out all about "clusters" and other opportunities, and they will begin to explore them within the framework of insights gained in outcome #1. The literature now abounds with teaching-learning activities and sources are noted both in the body of information needed by teacher-educators and in the bibliographical notes. However, one instructional approach should not be overlooked. This approach is most commonly known as the inductive or discovery technique. In its simplest form, students identify "jobs", "occupations", or whatever. In a practical way these can be called out in a classroom situation. The student offerings are written in random fashion on the chalkboard. When the wells runs dry, it is time for the next step -- classifying the offerings according to common elements. Teacher may suggest the categories or by discovery students may suggest classifications. Pure discovery proceeds in the latter instance. Guided or directed discovery emanates from the former teacher-directed approach. Which one is most efficacious depends upon the age and background of the students, the time available, and further steps in the activity. The culmination of the activity is to arrive at clusters of occupations which should approximate those developed in various curriculum sources. Students may be interested in checking the classifications arrived at through their efforts with the classifications developed by the Oregon State Department of Education.

3. Students should be able to relate their abilities and limitations to life roles and career goals.

This is a delicate and difficult area in which to develop activities. Traditionally, the American Dream calls for one to "hitch your wagon to a star," and Horatio Alger, Jr. is not yet a dim recollection of the early twentieth century. However, it may be that we must administer culture shock in order to avoid later disappointment. Computer technology is not for those who cannot master quantitative subjects. Perhaps the activity most suited for achieving this outcome is an individual conference in which the findings of 1 are related to the possibilities delineated in 2. At this point there should be increasing correlation with the people in counseling who are developing parallel approaches to career choices.

4. Students should be able to choose intelligently from among alternatives.

This outcome presupposed that alternatives have been pinpointed in the previous outcomes. How does one choose "intelligently" from among alternative career opportunities with their accompanying life styles? No one knows for sure how intelligent the choice is until ten, twenty, or thirty years after the choice is made. When the gold watch is presented upon retirement, it is then possible to assess the wisdom of choices among alternatives. However, such a view is applicable to almost all of the outcomes of education, so it should not deter us from attempting to develop activities that will lessen the "drift"

or "chance" element in choice. We fall back upon emphasizing the process involved in choice. Students look at several alternatives that have emerged from outcomes 1 and 2. They can project where they may be five or ten years hence if they make certain choices. Possibilities depending upon subject area include drawing a picture of what one may be doing in ten years if one chooses to become a _____. Other activities that teachers may give to students are:

(1) write a story based upon a choice
(2) write a autobiography as if you had made such-and-such a choice twenty year earlier
(3) make out a hypothetical income tax form based upon your choice
(4) write a biographical sketch for Who's Who based upon your career choice "twenty years ago"
(5) check your conclusions by visiting someone in the occupation you choose

Any activity which causes students to pause and reflect upon their careers is relevant to this outcome.

5. Entry-level skills for chosen careers.

This outcome is complicated by the need to catalogue numerous entry-level skills for numerous careers. Some of the clerical options have been delineated for many years. Type so many words per minute, take dictation at a certain speed, and know how to file according to specified catagories. Certain mechanical operations require specific skills in metals, use of tools, woodworking, maintenance, and use of blueprints. Other areas are less precise. As indicated earlier, entry-level skills for certain occupations may be a college education. Obviously a secondary school cannot provide education or training in all of the entry-level skills required for all occupations. The division of labor is among high schools, community colleges, trade schools, colleges and universities, and professional schools -- law, medicine, dentistry, et al. Furthermore, entry-level skills are dependent upon choices indicated in outcomes 1, 2, 3 and 4. Even though one later changes one's mind, it seems prudent for one who tentatively decides upon a career in computer technology to pursue extensive mathematics and related studies. One who intends to become a musician would be advised to study music. We must conclude, then, that entry-level skills do need to be determined for each occupational area, and indeed the Oregon cluster approach attempts to do just that. Activities most suitable for learning in each area must be tailored to the area. However, the basic skills such as the Language Arts will be applicable in many areas, and there are some general instructional approaches that apply. An example of the latter is one in which students set their own goals sometimes formalized as the "contract" approach. This approach is especially applicable to so-called skill areas but may be adapted to other areas. Typical applications include students setting the next typing speed they try to reach, the number of words per minute they will take in dictation, or the number of units of any-

thing that involves progressive increase in skill. Goals for the improvement of quality are also set by the students. Since the skill areas have traditionally been ones in which goals or standards are set by the teacher, the manual, the workbook, or other sources and usually held uniform for the entire class, it is sometimes quite a departure to individuals rates of progress. Not only does such an approach make it possible to develop entry-level skills, but it also prepares the student to "exceed himself" and move ahead in a position when he finally achieves one.

Teacher Competencies

Since classroom teachers responsible for a specific subject area have limited time and resources for dealing with career education, the following list of proficiencies is offered as a minimum level of competency.

1. Teachers need to know what career education <u>is</u> and what it <u>is not</u>.
2. Teachers need to know the state philosophy and school district philosophy in regard to career education.
3. Teachers need to know their own school's philosophy of career education.
4. Teachers need to have a philosophy of career education of their own.
5. Teachers need an understanding of the goals of their school in regard to career education.
6. Teachers need to be proficient in implementing objectives of their school and subject area in regard to career education goals.
7. Teachers need proficiency in selecting and implementing activities in their subject areas through which students can achieve career education objectives as specified in the student outcomes.
8. Teachers need to know the resources available to enhance classroom activities.
9. Teachers need to know resource persons available for consultation.
10. Teachers need to develop skill in determining the requirements for careers in their own subject areas.
11. Teachers need to know how to analyze a job and break it into its components.

12. Teachers need to be able to develop projects that will enable students to learn subject matter while engaged in occupational-related activities.

Career Education Information for Use in Teacher Education Programs

The career education knowledge needed for teacher education can be found in two main areas: The first main area is almost axiomatic. Various schools and school districts have developed guides based upon current accomplishments in the field of career education. It is true that these guides vary in quality and utility, but they still represent the best available sources of career education information necessary to implement the five student outcomes. If teachers attain the kind of proficiencies listed above, they will be able to examine these guides critically and glean from them the activities with the greatest utility. The bibliography notes many of these sources.

The other main area of the body of knowledge is found in the subejct areas. We must stress that an important element in each subject area is the relationship of that area of career choice, but also there are the career potentials within each subject area. Information related to specific subject areas is identified in the bibliography. These areas are Mathematics, Language Arts, Social Studies, Health and Physical Education, Fine Arts, Foreign Languages, and Science.

However, there is a need to distill minimum essentials from this body of knowledge. These essentials should be ones which will provide insights for persons engaged in teacher education including both potential teachers and the teachers of teachers. Such essentials should facilitate infusion of career education concepts into any type of course related to secondary teacher training. It is important that students in teacher education be able to relate career education concepts to their own intended teaching fields, so it is incumbent upon teachers of specialized education courses such as foundations, curriculum, and methods to provide students with insights that will enable them to conceptualize career relatioships even in those courses in which there in no overt reference to such relationships by the teacher or through discussion.

To illustrate an important principle in the training of secondary teachers, attention is hereby called to an example which applies in various disciplines. Cross disciplinary preparation in the Social Sciences is helpful for career potentials in law enforcement, urban studies, city planning and as background for subsequent specialization as career interests may focus or narrow. General Social Science preparation is the foundation for secondary school teaching in the Social Studies. Not to be overlooked is the value of the Social Sciences for those who engage in volunteer activities for charitable purposes, on government commissions, and in ad hoc organizations operating to meet certain specific goals such as improving the environment.

Examples from various disciplines in the Social Sciences serve to illustrate wherein lies the area of knowledge that can serve to infuse career education concepts in teacher education. The advantage of using college or university disciplines as points of departure for career education lies in the fact that teacher education students are already studying in these disciplines. The learning axiom of "start where the student is" is applicable. The next step is to relate career concepts from the disciplines to the area of knowledge needed for secondary teaching.

At this point an area is chosen to illustrate the relationshop between career concepts in the disciplines and the area of knowledge needed for secondary teaching. The area selected is Physical Education. Some career potentials arising out of a specialization in Physical Education are teaching professional athletics and sports, recreation, leisure, sports and athletic equipment, sports medicine, sports communications, fitness clinic, etc. More specific information may be found in various guides to career education prepared by individual school districts. Such guides usually also list competencies expected from students who select a career cluster for detailed study.

However, a secondary teacher will need to have encountered opportunities to explore and understand not only available positions and expected competencies, but also will need to understand the interrelationships of various phases of the discipline or field of specialty. With the example of Physical Education these include relationships between Health and Physical Education; the place of organized sports in career preparation; the connection of Physical Education to recreation; and perhaps many other more subtle connections which are best developed by college and university specialized study. Not only are the interrelationships among the internal areas of Physical Education important, but also the relationshops with other fields.

Finally, the analysis of utilizing areas of knowledge with the example of Physical Education needs to note that one can develop physical skills that will be helpful in many occupations and leisure activities. It is noted that fine-motor skills can be developed through physical exercise and games. Perhaps all students can benefit from fine-motor development, but students will especially benefit if they are looking at careers involving control of fingers, hands, and muscles on machinery, crafts, some vehicles, clerical equipment, and accounting equipment, to name only a few.

It is well to note also the contribution of Physical Education and its oft-related area of Health Education to the development of well-being so essential for pursuing any career. Physical Education and Health Education are especially well-chosen here as examples of an area of knowledge because both contribute to the previously mentioned importance of leisure as well as to the world of work. Also reference may be made again to the life styles which are concomitant to career choices. Through Physical Education one may discover potentials or

limits to physical ability and stamina. Quite simply one would not choose a job in the forest products industry that requires stong physical characteristics if one were of slight build and lacking in muscular strength. During the process of assessing realistically one's abilities, preferences, and limitations, it is conceivable that the number of push-ups one could perform in a physical fitness test would have direct bearing upon whether one became a logger or timekeeper.

Another question concerning teacher education programs is "How does the career education content vary from undergraduate to graduate courses?" It would seem that until there is a "reservoir" of knowledge developed, there will be no sharp distinction between undergraduate and graduate courses. For example, students in both undergraduate and graduate teacher education may be studying guides from school districts during the coming year or two. However, most graduate students in the teacher education are teaching or have been teaching recently, and therefore they are likely to be coming in contact with district guides at their schools. The task of these teachers may be to subject such guides to critical analysis on the basis of theory, utility, scope, and effectiveness. Undergraduates may have less basis in experience for this kind of in-depth analysis, but will profit from gaining a general familiarity with a number of different guides, their style, and their probable utility. Other differences between the undergraduate and graduate study in career education may emerge from the ongoing experiences of each institution preparing teachers.

Recommendations

1. College and university disciplines should be surveyed in the manner of the prototype survey of the Social Sciences. See Appendix III.

2. A matrix should be prepared showing the relationship of various disciplines to secondary school subjects. Key concepts of career education should be included.

3. There should be more exploration of the relationship of entry-level preparation to higher education.

4. The body of information should included study of relationship between technological change and entry-level skills.

5. School district guides should be available in teacher education resource centers.

6. There should be further study of differentiation between undergraduate and graduate study of career education.

7. This report should be used to acquaint business and industry leaders with the developing views of people involved in teacher education at the secondary level.

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INFUSION OF CAREER EDUCATION INTO SECONDARY TEACHER EDUCATION

The eight course syllabi included here indicate the way that three institutions chose to use materials in the first section of this document in courses required to complete the basic program for secondary teachers. They reflect a variety of ways that elements of career education can be infused into existing curricula. The individual strengths of each instructor and the uniqueness of each course necessitate that alternatives must be available. This indicates the strength of varied means for reaching the same goal.

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INFUSION OF CAREER EDUCATION INTO SECONDARY TEACHER EDUCATION

Three institutions, Portland State University, Oregon State University, and Oregon College of Education participated in efforts to infuse existing courses which prepare secondary teachers with career education. The eight syllabi which follow are offered as a preliminary guide to others who might wish to replicate this undertaking.

Ed 363 Secondary Block, Prepared by: James Ellingson, Oregon College of Education

Course Description -- Since Secondary Block is the first professional education course taken by secondary education majors, it serves not only as an introduction to secondary education, but also as a means of exploration in which students may discover, develop and test skills, interests, understandings, and attitudes in a public school environment. The block is composed of a classroom phase of 1½ hours per day and a field experience phase in which the student works in junior or senior high school classrooms a minimum of two hours daily. Students receive eleven quarter hours credit. A major purpose of the "block" is to act as a screening device by giving both the student and the college some data on which to make a decision on the advisability of proceding with a teaching career before major investments in time and money have been made.

Course Goals -- The student will demonstrate:

1. An understanding of basic learning principles and their relationship to the instructional process.
2. The ability to write appropriate course goals and performance indicators.
3. The ability to classify performance indicators (behavioral objectives) using Bloom's Taxonomy of Educational objectives.
4. The willingness and ability to use the above capabilities in planning for instruction.
5. An understanding of the instructional cycle.
6. An understanding of the facts, concepts, and principles that relate instructional objectives, measurement and evaluation.
7. The ability to construct appropriate written items and observational techniques for given objectives of an instructional unit.
8. The ability to use appropriate strategies in interaction with students, to bring about desired learning outcomes.
9. The ability to analyze teaching behavior.
10. An understanding of responsible student behavior and how to develop it in students.
11. An understanding of agencies and groups that support the instructional program and assist teachers in doing their jobs in the classroom.
12. AN UNDERSTANDING OF CAREER EDUCATION AND ITS PLACE IN THE EDUCATIONAL PROGRAM.
13. An understanding and appreciation of minority groups in American society.
14. The dynamics of staff relationships and the teacher's legal rights and responsibilities.

These competencies and concepts are organized around and integrated into the "Instructional (of Teaching) Cycle" which is made up of the following elements:

1. Assessment of Entry Behavior
2. Development of Objectives
3. Planning for Instruction
4. Implementation of Instructional Plans
5. Measurement and Evaluation of Student Progress and Teaching Strategies
6. Recycling, if necessary

General Course Content

1. Goals and Objectives--School, Program, and Course Goals--Performance Indicators
2. Bloom's Taxonomy
3. Flander's System of Interaction Analysis
4. Development of Responsible Student Behavior (Classroom and general school discipline)
5. CAREER EDUCATION
6. Planning and Evaluation
7. The Instructional Cycle
8. General Curriculum Development
9. Teaching Strategies
10. Public School Organization
11. Teacher Rights and Responsibilities
12. Student Assessment Procedures
13. Intercultural Relations

Major Learner Activities

1. Planned Course Statement in Student's Subject Matter Area
2. Written Lesson Plans
3. Peer Teaching and Classroom Teaching
4. Use of Flander's and other Methods of Teacher Observation, including Video-tape
5. Field Experience
6. Written Papers or Projects
7. Oral Reports and Class Discussion
8. Resource People
9. Field Trips

Procedures for Evaluation

Statement: Students are evaluated on the basis of performance on two written examinations, performance in their field experience, and peer teaching exercises, quality of written assignments, and participation in class discussions.

Career Education Emphasis

The "Secondary Block" is in itself a Career Exploration and Development activity. Hence, it easily lends itself to the inclusion of many of the concepts and skills embodied in career education. In order to integrate career education in the block in a meaningful manner the following goals were selected from the study "Career Education Personnel Development for Graduate/Undergraduate Programs" completed by the Ohio State University Center for Vocational Education. These goals are directly related to the course goals of the block and to the needs of the State of Oregon for teachers who are familiar with and can assist schools in implementing the new State Standards and Graduation Requirements.

The following goals hierarchy demonstrates the interdisciplinary concept by which the selected goals were integrated into the course goals for the "Block".

Course Goals as Listed in Planned Course Statement for Secondary Block	Related Career Education Goals in Following List
12	1,2,3,4,7
13	6,8
1,2	9
8	10,12,13

CAREER EDUCATION GOALS AND RELATED CLASSROOM ACTIVITIES
Ed. 363 - Secondary Block

GOAL	TEACHER/LEARNER ACTIVITIES
G-1 IDENTIFY A WORKING DEFINITION OF CAREER EDUCATION.	A-1(a) Studied and discussed S.D.E. and USOE definitions A-1(b) Discussed definitions used in Salem Public Schols with Bob Elden, Salem Career Ed. Specialist and Jim Baltimore, Sprague Career Ed. Director.
G-2 DEVELOP AN UNDERSTANDING OF CAREER AWARENESS, CAREER EXPLORATION, AND CAREER PREPARATION CONCEPTS.	A-2(a) Studied and discussed S. D. E. Documents A-2(b) Visited Sprague Career Resource and Information Center A-2(c) Discussion of concepts by Professor, Jim Baltimore and Bob Elden A-2(d) Classroom exercise on Career Awareness
G-3 DELINEATE BASIC PRINCIPLES THAT UNDERLIE CAREER EDUCATION.	A-3(a) Studied and discussed history of secondary education in terms of relevancy to the society in which schools exist. A-3(b) Discussed Oregon Graduation Requirements A-3(c) Discussion of Life Role Concepts

GOAL	TEACHER/LEARNER ACTIVITIES
G-3 continued . . .	A-3(d) Presentation by Bob Elden on general curriculum development and on the interdisciplinary approach to Career Education. A-3(e) Visited C.R.I.C. and discussed basic concepts with Sprague personnel.
G-4 EXTEND KNOWLEDGE AND UNDERSTANDING OF THE WORLD OF WORK, CAREER CLUSTERS, OR SIMILAR CONTENT SOURCES REGARD-CAREER INFORMATION.	A-4(a) Read and discussed Oregon Cluster Concept A-4(b) Visited Career Cluster Programs at Sprague and discussed them with the teachers. A-4(c) Discussed Work Experience Programs with Alicia Kannier, Sprague Coordinator. A-4(d) Visited Career Cluster Programs at Chemeketa Community College and discussed them with college administrators.
G-5 DEVELOP/APPLY APPROPRIATE AND VARIED INTERPERSONAL SKILLLS NECES-SARY FOR PLANNING AND IMPLEMENTING CAREER EDUCATION EXPERIENCES.	A-5(a) Administered and discussed IPAT A-5(b) Discussed interpersonal relations within context of the field experience and other career education experiences. A-5(c) Participated in Consensus Task A-5(d) Discussed interhuman relations and implications for minority groups.

GOAL	TEACHER/LEARNER ACTIVITIES
G-6 DEVELOP A KNOWLEDGE OF INTER-GROUP/ INDIVIDUAL DIFFERENCES IN MOTIVES ATTITUDES, VALUES, AND SOCIAL NORMS AND OF INFLUENCE OF THOSE DIFFERENCES ON RESPONSES TO SCHOOLING AND CAREERS.	A-6(a) Discussed life roles and life styles and their relationship to careers. A-6(b) Discussed minority groups A-6(c) Discussed attitudes and feelings toward different types of students in the field experience.
G-7 DEVELOP A RATIONALE FOR INFUSING CAREER EDUCATION IN THE CIRRICULUM.	A-7(a) Studied and discussed Salem School district philosophy of interdisciplinary approach with selected school personnel. A-7(b) Studied and discussed history of career education in relation to secondary education.
G-8 IDENTIFY/DEVELOP AN UNDERSTANDING OF EQUALITY CONCEPTS AND ROLES IN CAREER EDUCATION AS THEY RELATE TO PAST AND PRESENT RACE AND SEX STEREO-TYPING AND TRENDS AMONG CULTURES AND IN WORK.	A-8(a) Discussed employment trends and opportunities with Chemeketa Community College personnel and Sprague High School work experience coordinator.
G-9 DEVELOP CAREER EDUCATION OBJECTIVES IN THE COGNITIVE, AFFECTIVE, AND PSYCHOMOTOR DOMAINS.	A-9(a) Examined Salem School District program guides and identified objectives in the three domains.

GOAL	TEACHER/LEARNER ACTIVITIES
G-9 continued . . .	A-9(b) Studied Oregon Graduation Requirements A-9(c) Demonstrated ability to write objectives in the cognitive and affective domains.
G-10 DEVELOP LEARNING ACTIVITIES WHICH INFUSE/INTEGRATE CAREER AWARENESS, CAREER EXPLORATION, CAREER PREPARATION CONCEPTS INTO APPROPRIATE LEVELS OF A CURRICULUM.	A-10(a) Studied and discussed school district curriculum guides that specified career education goals for each grade level. A-10(b) Studied Tri-County Goal Statements in each subject matter area and discussed the interdisciplinary approach to Career Education. A-10(c) Participated in a class exercise designed to acquaint students with instructional strategies related to Career Awareness.
G-12 UTILIZE REINFORCEMENT TECHNIQUES IN TEACHING CAREER AWARENESS, CAREER EXPLORATION, AND CAREER PREPARATION ACTIVITIES RELATED TO SELF CONCEPT.	A-10(d) Participated in a class exercise taken from the "CIS Recipe Book" to make students aware of the instructional possibilities of CIS. A-10(e) Some students developed units for infusing career education into the academic disciplines.
G-13 UTILIZE SIMULATION, ROLE-PLAYING, AND GAMING EXPERIENCES APPROPRIATE FOR CAREER AWARENESS, CAREER	A-10(f) Some students participated in career education activities in the junior or senior high school classrooms as part of their field experience.

GOAL	TEACHER/LEARNER ACTIVITIES
G-13 continued . . . EXPLORATION, AND CAREER PREPARATION ACTIVITIES	A-10(g) All students required to participate in micro-teaching a lesson utilizing appropriate strategies for video-taping and critiquing by class.
G-11 INVOLVE STUDENTS AND COMMUNITY IN THE DESIGN/ IMPLEMENTATION OF CAREER-ORIENTED INSTRUCTION.	A-11(a) Discussed one of Sprague's major goals, community involvement in the school program with Sprague personnel. A-11(b) Discussed the use of advisory committees in the Cluster Programs.
G-14 DEVELOP/ORGANIZE/UTILIZE A COMMUNITY RESOURCE FILE TO DEVELOP CAREER EDUCATION INSTRUCTION.	A-11(c) Discussed the extensive volunteer program at Sprague with the coordinator. A-11(d) Junior Block students act as resource people in public school classrooms and arrange for other resource people to assist classroom teachers.
G-15 ADMINISTER, SCORE, AND INTERPRET EXISITING AND/OR DEVELOPED EVALUATION INSTRUMENTS FOR CAREER EDUCATION.	A-15(a) Each student required to take, score, and interpret IPAT.

Revised Syllabus
Ed 522 & 571
Junior High &
Secondary School
Curriculum,
Prepared by:
Dr. James Ellingson,
Oregon College of
Education

Course Description -- Overview of the secondary school curricula, with emphasis on the various subject fields; organization of the school for curriculum development; educational objectives; the course of study; evaluation of the secondary school curriculum.

Course Goals -- The student will demonstrate:

1. The ability to develop an operational definition of the term "curriculum"
2. An understanding of the process of curricular change.
3. A knowledge and understanding of the various individuals, forces, and factors which have or have had significant impact on the curricula of American Secondary Schools.
4. An understanding of the Oregon State system of public education.
5. The ability to develop a pracitcal, usuable plan for curricular change in a particular subject matter area.
6. An awareness of the various curricular innovations currently in practice and in the experimental/developmental stages in Oregon and the major national curriculum movements.
7. An understanding of career education, its place in the educational program, and the current status in Oregon.
8. An understanding of the new Oregon high school graduation requirements and how secondary schools are responding to them.
9. The ability to discuss in a knowledgeable manner some of the current issues in Secondary Education which have implications for curriculum development.

Major Learner Activities

1. Planned course statements
2. Oral and written reports on educational issues
3. Field trip to visit career education programs at the community college or high school level
4. Guest speakers
5. Development of a proposal for a curricular change and defending it before a group of peers
6. Lecture and class discussions
7. Small group activities

Procedures for Evaluation

Statement: Students will be evaluated on the basis of the quality of their individual projects, participation in class discussion, and one examination. The major portion of the grade will be based on the quality of the term project. The purpose of this assignment is to develop a practical, usable plan for the implementation of a curricular change that the student feels is necessary to enhance the ongoing school program with which he or she is closely involved, or to study in some depth an issue in secondary education that has implications for curriculum development.

Students will be given credit for Ed 522 or Ed 571 depending upon the school level for which their project is intended.

CAREER EDUCATION GOALS AND RELATED CLASSROOM ACTIVITIES
Ed 522 - Secondary School Curriculum

GOAL	TEACHER/LEARNER ACTIVITIES
G-1 IDENTIFY A WORKING DEFINITION OF CAREER EDUCATION.	A-1(a) Studied and discussed S.D.E. and USOE definitions A-1(b) Discussed definitions used in Salem Public Schools with Bob Elden, Salem Career Ed. Specialist and Jim Baltimore, Sprague Career Ed. Director.
G-2 DEVELOP AN UNDERSTANDING OF CAREER AWARENESS, CAREER EXPLORATION, AND CAREER PREPARATION CONCEPTS.	A-2(a) Studied and discussed S.D.E. documents A-2(b) Discussion of concepts by professor and several students who are working in Career Education positions.
G-3 DELINEATE BASIC PRINCIPLES THAT UNDERLIE CAREER EDUCATION.	A-3(a) Studied and discussed history of secondary education in terms of relevancy to the society in which schools exist. A-3(b) Discussed Oregon Graduation Requirements A-3(c) Discussion of Life Role Concepts A-3(d) Discussion of general curriculum development and on the interdisciplinary approach to Career Education.

GOAL	TEACHER/LEARNER ACTIVITIES
G-4 EXTEND KNOWLEDGE AND UNDERSTANDING OF THE WORLD OF WORK, CAREER CLUSTERS, OR SIMILAR CONTENT SOURCES REGARDING CAREER INFORMATION.	A-4(a) Read and discussed Oregon Cluster Concept A-4(b) Visited Career Cluster Programs at Chemeketa Community College and discussed them with college administrators.
G-7 DEVELOP A RATIONALE FOR INFUSING CAREER EDUCATION INTO THE CURRICULUM.	A-7(a) Studied and discussed Salem School district philosophy of interdisciplinary approach with selected school personnel. A-7(b) Studied and discussed history of career education in relation to secondary education.
G-8 IDENTIFY/DEVELOP AN UNDERSTANDING OF EQUALITY CONCEPTS AND ROLES IN CAREER EDUCATION AS THEY RELATE TO PAST AND PRESENT RACE AND SEX STEREOTYPING AND TRENDS AMONG CULTURES AND IN WORK.	A-8(a) Discussed employment trends and opportunities with Chemeketa Community College personnel.
G-10 DEVELOP LEARNING ACTIVITIES WHICH INFUSE/INTEGRATE CAREER AWARENESS, CAREER EXPLORATION, CAREER PREPARATION CONCEPTS INTO APPROPRIATE LEVELS OF A CURRICULUM	A-10(a) Studied and discussed school district curriculum guides that specified career education goals for each grade level. A-10(b) Studied Tri-County Goal Statements in each subject matter area and discussed the interdisciplinary approach to Career Education.

	TEACHER/LEARNER ACTIVITIES
G-12 UTILIZE REINFORCEMENT TECHNIQUES IN TEACHING CAREER AWARENESS, CAREER EXPLORATION, AND CAREER PREPARATION ACTIVITIES RELATED TO SELF CONCEPT. G-13 UTILIZE SIMULATION, ROLE PLAYING, AND GAMING EXPERIENCES APPROPRIATE FOR CAREER AWARENESS, CAREER EXPLORATION, AND CAREER PREPARATION ACTIVITIES.	A-10(c) Some students developed units for infusing career education into the academic disciplines.

Revised Syllabus:
Ed 311, Secondary
Theory & Practicum II
Prepared by:
Mr. Gary Kramer &
Mr. George Bramlett,
Oregon State University

The course is developed around seven conceptual topics. The Descriptive Factors, Competencies/Goals, Teaching Strategies and Reading Assignments given for each topic reflect the career education concepts throughout the course.

CONCEPTUAL TOPIC: Career Education

Descriptive Factors:

(1) Recognizes the centrality of careers in shaping lives by determining or limiting where individuals work, where they live, their associates, and other dimensions that are significant in defining the life style.

(2) Provides for each person to make informed choices as he/she develops his/her own career.

(3) Allows the student time to explore his abilities, interests and attitudes, relate them to career opportunities, and make valid decisions regarding further education and/or work.

(4) Enables the individual to analyze factors relating to attaining and maintaining a job.

(5) Integrates learning and doing.

(6) Develops techniques and structures for fostering self-direction and decision making.

(7) Gears the sequence of learning activities to the student's individual abilities and interests.

(8) Allows youth to evaluate themselves.

(9) Enables the individual to recognize that learning is a continuing process.

(10) Improves overall pupil performance by focusing basic subjects around a career development theme.

(11) Develops the student's ability to gather information and apply it in solving problems and making rational decisions.

(12) Enables the individual to identify some of the reasons why people work and to differentiate between societal and individual needs in working.

(13) Increases motivation through a sense of competence derived through experimentation in job skills.

(14) Establishes interrelationships among categories and disciplines to bring about the total development of the individual.

(15) Interrelates all the various dimensions of education to the concept of career education for all.

(16) Involves coping with all spheres of existence - work, leisure, intellectual development and social involvement.

Competencies/Goals:

(1) Develop and/or extend knowledge and understanding of relationships among education, careers, culture, and lifestyles.

(2) Identify a working definition of career education.

(3) Develop an understanding of career awareness, career exploration, and career preparation concepts.

(4) Delineate basic principles that underlie career education.

(5) Identify major goals of career education.

(6) Differentiate between career education and career development.

(7) Extend knowledge and understanding of the world of work, career clusters, or similar content sources regarding career information.

(8) Develop and/or extend knowledge and understandings regarding the varied societal segments within a community and identify the implications/relationships of that information about each segment for careers, education, family, lifestyles, and culture.

(9) Identify and develop understandings of career education concepts, career education roles, and the cooperation needed to implement career education as an integral part of educational experiences within the community.

(10) Identify the implications of career education for the entire education of each individual student.

(11) Develop a knowledge of the historical, philosophical, sociological, and psychological foundations of career education concepts.

(12) Develop/apply appropriate and varied interpersonal skills necessary for planning and implementing career education experiences.

(13) Identify, study, and apply skills and guidelines designed to reduce worker alienation.

Teaching Strategy:

(1) Identify specific relationships among education, careers, culture, and lifestyles; (e.g., the general characteristics of lifestyles associated with careers; cultural characteristics which may have significance for lifestyles and/or careers; and the common and/or unique educational requirements significant for careers).

(2) Identify/compare past relationships and trends of work, lifestyles, education, culture to present trends of work, lifestyles, education and culture.

(3) Read various definitions of career education. Discuss in a group and list ideas regarding: (1) The importance of developing a definition of career education; (2) Commonalities and differences among the definitions presented; and (3) A tentative working definition of career education. If the group reaches no consensus regarding definition, it should record the main trends or ideas in the discussion for future reference.

(4) Write a concise definition of career education as you understand it operates in a school system. Enlist review/critique of your definition by a panel of personnel involved in career education. Revise the definition, based upon review data.

(5) Write a personal career education philosophy consistent with one's working definition of career education.

(6) Study two or more sources in career development and distinguish among career awareness, career exploration, and career preparation concepts. Write a summary of principles for each.

(7) Research the conceptual assumptions of basic career education concepts in the literature, such as in USOE's Policy Paper, An Introduction to Career Education, pp. 4 and 5; specify underlying principles for each assumption.

(8) Discuss in small groups the differences and/or similarities among the goals of career education and education found in a given set of literature sources.

(9) Identify/list various career education resources that differentiate between career education and career development; give a presentation explaining the differences.

(10) Develop a presentation for a community group that demonstrates/illustrates the distinctions between career education and career development.

(11) Develop a chart or illustration of the 15 USOE career clusters with their corresponding families of occupations and/or other career information.

Reading Assignments:

(1) State Dept. of Ed.: "The Oregon Way."

(2) Ken Hoyt: "Career Education: What It Is/How To Do It."

CONCEPTUAL TOPIC: The School as a Social System

Descriptive Factors:

(1) Demonstrates concern for individuals.

(2) Permeates all levels of education.

(3) Is a basic part of all education.

(4) Establishes interrelationships among categories and disciplines to bring about the total development of the individual.

(5) Affects every student and embraces the entire range of the school system.

(6) Constitutes a new, vitalizing thrust in education.

(7) Should be universally accessible at all levels.

(8) Is a current on-going process that is primarily developmental in nature.

(9) Encourages the recognition that people do not have the same interests or abilities.

(10) Interrelates all the various dimensions of education to the concept of career education for all.

Competencies/Goals:

(1) Identify the implications of career education for the entire education of each individual.

(2) Develop/apply appropriate and varied interpersonal skills necessary for planning and implementing career education experiences.

Teaching Strategies:

(1) Conduct a case study of a child identified in school (K-12). Identify the educational needs of that student and the implications of career education for meeting those needs.

(2) Participate in small group discussions wherein they (trainees) examine (1) those personal-social qualities that they are proud of (e.g., hard working, patient, dependable, unselfish, etc.), and (2) occupations for which they feel they have appropriate personal-social skills.

(3) Observe a meeting of city council, school board, faculty, student council, teacher associations or other groups to identify/compare/analyze and report on career role relationship and the influence people with leadership/authoritative roles have on performance in group situations.

Reading Assignments:

(1) Silberman: "The Changing School" pp. 239-250

(2) Combs: "Varied Roles of Helpers" pp. 272-286

CONCEPTUAL TOPIC: Cognitive Development of Children

Descriptive Factors:

(1) Establishes interrelationships among categories and disciplines to bring about the total development of the individual.

(2) Affects every student and embraces the entire range of the school system.

(3) Leads the individual through the progressive states of career awareness, orientation, exploration, and preparation of career development.

(4) Enables the individual to recognize that the academic skills learned in elementary schools have application to the world of work.

(5) Increases the student's motivation to learn by relating his studies to the world of work.

(6) Allows a student to gain: (1) a full educational preparation, (2) a broad understanding of the world of work, (3) social maturity, (4) a positive resilient self-concept, and (5) a familiarity with social problems as they emerge from practical experience.

(7) Leads to employment, whether as farmer, musician, plumber, or physician. Is the combined effort of public education/community to prepare the individual for a meaningful and satisfying life.

(8) Stimulates the kind of educational program in which every pupil can succeed.

(9) Involves coping with all spheres of existence-work, leisure, intellectual development, social involvements.

(10) Interrelates all the various dimensions of education to the concept of career education for all.

(11) Recognizes the centrality of careers in shaping lives by determining or limiting where individuals work, where they live, their associates, and other dimensions that are significant in defining the lifestyle.

(12) Integrates learning and doing.

(13) Gears the sequence of learning activities to the student's individual interests and abilities.

(14) Improves overall pupil performance by focusing basic subjects around a career development theme.

(15) Explore interrelationship between attitude, ability, experience and performance.

(16) Reduce the discontinuity between childhood education and adult work.

Competencies/Goals:

(1) Develop an understanding and knowledge of child development as it relates to the world of work.

(2) Develop units of instruction involving basic information about the world of work.

(3) Design/implement individualized instructional units oriented for student career awareness, career exploration, and career preparation.

(4) Identify/develop self-evaluation skills for career awareness, career exploration, and career preparation.

(5) Identify/develop needs assessment instrumentation for career education. Develop techniques necessary to implement needs assessment instruments for career education program planning.

Teaching Strategies:

(1) Review several sources on the concept/theory underlying child development.

(2) Discuss work as it affects one's educational, social and economic being, and vice versa.

(3) Develop a plan for constructing a career information system for use in the K-12 classroom.

(4) Plan/implement learning activities which require students (K-12) to investigate various occupations within a selected career cluster(s).

(5) Develop individualized/programmed instructional units at each developmental level that meet minority group needs in relation to careers in the community.

(6) Design/implement an instructional unit which includes a learning contract that requires a student to demonstrate competency in career entry-level skills. List career education self-evaluation skills determined through: (1) classroom observations (K-12), (2) review of self-instruction career education packages and the literature, and (3) interviews of counselors in career education.

(7) Discuss the relative importance of each identified skill for career awareness, exploration, or preparation.

(8) Review three needs assessment instruments; select one for determining career education needs of students in a given classroom. Implement the instrument and list techniques utilized.

Reading Assignment:

(1) Silberman: "Psychological Controversies in Teaching" pp. 169-177.
"Nurturing the Cognitive Skills of Productive Thinking" pp. 189-196.
"The Child and the Inquiry Process" pp. 149-159.

CONCEPTUAL TOPIC: Affective Development of Children/Youth/Value Clarification

Descriptive Factors:

(1) Is for all youth who would like their education to be more relevant to life outside the school.

(2) Increases the student's motivation to learn to be relating his studies to the world of work.

(3) Allows youth to evaluate themselves.

(4) Enables the individual to recognize that learning is a continuous process.

(5) Develops techniques and structures for fostering self-direction and decision making.

(6) Assumes that education is preparation for life in which one chooses his/hers own particular role.

(7) Facilitates learning in the broadest sense to help the individual achieve effective participation in all his life roles.

(8) Enables the individual to demonstrate an awareness of the diversity of life roles which exist and show positive feelings about those that are different from his/hers.

(9) Broadens young people's career horizons.

(10) Develops student attitudes about the significance of work.

(11) Develops the student's ability to gather information and apply it in solving problems and making rational decisions.

(12) Stimulates the kind of educational program in which every student can succeed.

(13) Increases one's adaptability to change.

Competencies/Goals:

(1) Plan/implement learning experiences which are integrated with respect to education, careers, culture, home, family and lifestyles.

(2) Design/implement valuing experiences which pertain to career education concepts.

(3) Plan/implement group interaction for developing skills required to perform satisfactorily in working with others.

Teaching Strategies:

(1) Design/implement a series of learning activities which expose students to varied lifestyles and require students to analyze and evaluate lifestyles in relation to self.

(2) Design/implement learning activities which help students develop, clarify, and assimilate personally meaningful sets of work values.

(3) Design/implement values clarification exercise which reveal to students how their values influence career choice.

(4) Design/implement learning experiences whereby students have the opportunity to express feelings about self within a group setting, to respect the feelings expressed, and to determine ways to adjust group tasks to accommodate feelings and at the same time reach group goals.

Reading Assignment:

(1) Silberman: "Defense and Growth" pp. 43-51. "Self-Concept: Product and Producer of Experience" pp. 39-61. "Freedom and Self-Actualization" pp. 143-164.

CONCEPTUAL TOPIC: Instruction and Learning

Descriptive Factors:

(1) Establishes interrelationships among categories and disciplines to bring about the total development of the individual.

(2) Affects every student and embraces the entire range of the school system.

(3) Leads the individual through the progressive stages of career awareness, orientation, exploration, and preparation of career development.

(4) Demonstrates concern for the individual.

(5) Encourages the recognition that people do not have the same interests or abilities.

(6) Interrelates all the various dimensions of education to the concept of career education for all.

(7) The goal of career education is comprehensive learning, not vocational training.

(8) Is a new partnership in learning for life.

(9) Increases the student's motivation to learn by relating his/ her studies to the world of work.

Competencies/Goals:

(1) Develop curriculum goals/objectives which pertain to career education.

(2) Develop career education objectives in the cognitive, affective, and psychomoter domains.

(3) Develop learning activities which infuse/integrate awareness, career exploration, career preparation concepts into appropriate levels of curriculum.

(4) Plan/implement career education experiences within varied geographic settings.

(5) Utilize simulation, role-playing, and gaming experiences appropriate for career awareness, career exploration, and career preparation activities.

(6) Utilize "hands-on" experiences appropriate for career education activities.

(7) Identify/involve community personnel (e.g., senior citizens, those in business, industry, labor, parents, those in professions within and outside education) in career education teaching-learning experiences.

(8) Develop/demonstrate methods for assessing pupil growth in the ability to work with others in varied career education experiences.

(9) Identify major goals of career education.

(10) Extend knowledge and understanding of the world of work, career clusters, or similar content sources regarding career information.

(11) Develop/apply appropriate varied interpersonal skills necessary for planning and implementing career education experiences.

(12) Develop an understanding and knowledge of child development as it relates to the world of work.

Teaching Strategies:

(1) Write behavioral objectives for a unit on developing career decision-making skills.

(2) Examine the program goals and objectives of a career education model, such as the USOE school-based model, and identify examples of objectives in each of the domains: cognitive, affective, and psychomotor.

(3) Design/implement role-playing activities at the elementary level to develop awareness of varied occupational groups within a community.

(4) Develop a curriculum unit for use at the junior high level to extend the student's knowledge of self in relation to career interests, abilities, values, and needs.

(5) Design/implement learning activities within a curriculum unit which requires students (K-12) to demonstrate knowledge of the school as a miniature social system with positions, roles, role relationships, rules, traditions, and communications patterns.

(6) Plan/implement a unit which examines careers and lifestyles, such as urban, rural, or the like, and which includes on-sites observations or simulated experiences. Compare nature of careers and lifestyles within those settings.

(7) Review career games involving decision-making skills; select one for each level of career development: awareness, exploration, and preparation. Involve elementary students in a game to develop awareness skills in career decision-making, junior high school students in a game to develop exploration skills in career decision-making.

(8) Role-play worker roles at awareness, exploration, and preparation levels of career development for two occupations. Compare findings of role-play analysis with information collected by interview of two workers employed in the selected occupations.

(9) Develop/implement a lesson on a career-related topic which involves (K-12) students in "hands-on" experiences related to chosen occupations (e.g., hospital services, plumbing, etc.).

(10) Choose a career education topic; prepare and implement a lesson plan for involvement of community resource personnel.

(11) Identify, through review of literature and observation of students in group work, student characteristics/skills that are necessary for effective group work in career-related experiences.

(12) Develop items for assessing specific attitude characteristics identified; prepare sociogram task for analysis based on characteristics and skills identified.

(13) Design a series of bulletin board displays, each based upon the major goals of career education for a given age or developmental level.

(14) Develop a chart or illustration of the 15 USOE Career clusters with their corresponding families of occupations and/or other career information.

(15) Participate in small group discussions wherein they (trainees) examine: (1) those personal-social qualities that they are proud of (e.g., hard-working, patient, dependable, etc.) and (2) occupations for which they feel they have appropriate personal-social skills.

(16) Discuss women's liberation, family structure, and adolescent rebellion as each relates to authority and democracy in the world of work.

(17) Discuss/describe possible causes of conflict situations in interpersonal relations, e.g., value and belief difference, miscommunication, or opposing goals.

(18) Discuss work as it affects one's educational, social, and economic being, and vice versa.

Reading Assignments:

(1) Silberman: "Some Classroom Quiddities for People Oriented Teachers" pp. 261-268. The Facilitation of Significant Learning" pp. 276-278.

(2) Combs: "Learning as Meanings Change".

CONCEPTUAL TOPIC: Classroom Behavior

Descriptive Factors:

(1) Is for all youth who would like their education to be more relevant to life outside the school.

(2) Increases the student's motivation to learn by relating his studies to the world of work.

(3) Enables the individual to recognize that learning is a continuing process.

(4) Allows the student time to explore his/her abilities, interests and attitudes, relate them to career opportunities, and make valid decisions regarding further education and/or work.

(5) Develops techniques and structures for fostering self-direction and decision making.

(6) Assumes that education is preparation for life in which one chooses ones own particular role.

Competencies/Goals:

(1) Develop/apply appropriate and varied interpersonal skills necessary for planning and implementing career education experiences.

(2) Develop a knowledge of intergroup/individual differences in motives, attitudes, values, and social norms and/or influence of those differences on responses to schooling/careers.

(3) Clarify developmental tasks and roles of persons implementing career education.

(4) Utilize reinforcement techniques in teaching career awareness, career exploration, and career preparation activities related to self-concept.

(5) Develop/demonstrate methods for assessing pupil growth in the ability to work with others in varied career education experiences.

Teaching Strategies:

(1) Discuss/describe possible causes of conflict situations in interpersonal relations, e.g., value and belief differences, miscommunication, or opposing goals.

(2) Role play examples of authority conflict situations in the school (teacher-student, teacher-teacher, teacher-administrator, or in other settings). Discuss in class the effect/influence that individual dif-

ference of opinion have on education and career planning. Discuss alternative approaches that those working as a group may utilize in order to accomplish a task.

(3) Perform as an aide or assistant to a teacher or guidance counselor in career education learning experiences (simulated or real) for students (K-12) in a given class/grade level; keep a log of tasks/roles performed by all personnel who are involved in those career education experiences, e.g., those of teacher and others.

(4) Discuss the concepts of behavior modification and role play the techniques involved. Utilize behavior modification techniques for reinforcement learning.

(5) Discuss the importance of non-verbal communication in teaching and participate in activities which require observation/analysis of non-verbal behaviors of self and others.

(6) Identify/select an existing attitude test to assess pupil attitude toward working with others in assembly work; develop an instrument that assesses knowledge of work habits required for assembly work. Administer each to a group of students at the beginning and end of six weeks or a semester.

(7) Determine for each student growth in: [1] attitude toward working with others, and [2] knowledge of work habits, as both relate to assembly work; share these results with the student.

(8) Demonstrate two or more methods (such as micro-teaching, nonverbal analysis, and the like, done from videotapes) for assessing pupil growth in ability to work with others. Make appropriate inferences concerning one's growth in ability to work with others of a team.

Reading Assignments:

(1) Silberman: "Factors that Aid and Hinder Creativity" pp. 178-188. "Excerpts from Lives of Children" pp. 52-56.

(2) Combs: "Establishing Helping Relationships" pp. 224-228.

CONCEPTUAL TOPIC: Cultural Diversity

Descriptive Factors:

(1) Is for all high and low achievers, college bound youth and dropouts.

(2) Permeates all levels of education.

(3) Demonstrates concern for the individual.

(4) Encourages the recognition that people do not have the same interests or abilities.

(5) Is a basic part of all education.

(6) Recognizes the urgent necessity of making sure that every pupil is prepared through education to find his/her place in society and in the economy.

(7) Should be universally accessible at all levels.

(8) Increases one's adaptability to change.

(9) Gears the sequence of learning activities to the student's individual interests and abilities.

(10) Enables the individual to demonstrate an awareness of the diversity of life styles which exist and show positive feelings about those that are different from his/hers.

(11) Introduces a new sense of focus in education.

(12) The goal of career education is comprehensive learning, not vocational training.

(13) Is a new partnership in learning for life.

(14) Enable the individual to demonstrate an awareness of the diversity of life styles which exist and show positive feeling about those that are different from his/ hers.

Competencies/Goals:

(1) Plan/implement learning experiences which are integrated with respect to education, careers, culture, home, family, and life styles.

(2) Plan/implement career education experiences within varied geographic settings.

(3) Develop learning activities that involve disadvantaged, minority, gifted and talented, and handicapped students in career education.

(4) Plan/implement group interaction career-related experiences for developing skills required to perform satisfactorily working with others.

(5) Develop learning activities that involve disadvantaged, minority, gifted and talented, and handicapped students in career education.

(6) Utilize reinforcement techniques in teaching career awareness, career exploration, and career preparation activities related to self-concept.

(7) Identify/involve community personnel (e.g., senior citizens, those in business, industry, labor, parents, those in professions within and outside education) in career education teaching-learning experiences.

(8) Evaluate career education as an integral part of education.

(9) Develop a knowledge of intergroup/individual differences in motives, attitudes, values, and social norms and of influence of those differences on response to schooling and careers.

(10) Develop human relations skills and group counseling techniques to assist students with self awareness/career exploration.

(11) Develop an understanding and knowledge of child development as it relates to the world or work.

(12) Identify career education goals and objectives based on career development concepts appropriate to child/adolescent growth and development.

(13) Develop/demonstrate an understanding of decision-making and problem-solving skills as they relate to career choice and career preparation.

(14) Identify/exhibit attitudes and behaviors toward careers which enhance student (K-12) self-concept development.

(15) Identify/develop an understanding of equality concepts and roles in career education as they relate to past and present race and sex stereotyping and trends among cultures and in work.

(16) Develop/coordinate/implement "team efforts" among school/community personnel in the teaching-learning process--instruction and/or performance experiences in career education.

(17) Develop curriculum goals and objectives which pertain to career education.

(18) Plan/implement learning experiences which are integrated with respect to education, careers, culture, home, family, and lifestyles.

(19) Develop curricula that include the self-analysis/self-evaluation process in career awareness, career exploration, and career preparation.

(20) Design-implement valuing experiences which pertain to career education concepts.

Teaching Strategies:

(1) Plan/implement a unit of instruction which focuses on the cultural influences which affect lifestyle and career choice.

(2) Develop individualized programmed instructional units at each developmental level that meet minority group needs in relation to careers in the community.

(3) Plan a unit which examines lifestyles, such as urban, rural, ethnic and which includes on-site visitations or simulated experiences. Compare nature of lifestyles within those settings.

(4) Conduct a literature search. Interview a sample of D/H students; determine their needs and career interests.

(5) Determine career interests of K-12 students in a given classroom. Search for appropriate career information sources for students' interests and levels of ability. List appropriate objectives for the given students to accomplish objectives which are appropriate to the developmental levels and career interests of individuals in the classroom.

(6) Select a career development concept such as: (1) The changing roles of women in the world of work, or (2) Respect for the individual and the work one does (based upon understanding the values of work, lifestyles, and the contributions of the individual worker to self and to others). Develop a unit of instruction for K-12 students, based upon a selected concept which is appropriate to interests and levels of ability. Write objectives for the unit and appropriate alternative strategies to meet the objectives.

(7) Simulate the problem of three friends who go together for an interview for the same position. After interviewing each person individually, the employer calls all three in for a conference (together) to explain that all three are qualified but only one position is available. The employer asks the three friends to decide among themselves which one will accept the position.

(8) Discuss/describe possible causes of conflict situations in interpersonal relations, e.g., value and belief differences, miscommunication, or opposing goals.

(9) Role play examples of authority conflict situations in the school (teacher-student, teacher-teacher, teacher-administrator, etc.) or in other settings. Role play family authority conflicts to develop skills to resolve adult-adolescent conflicts. Discuss alternative responses for solving conflicts.

10) Assign short-term career-related group tasks. Allow each group to discuss individual behaviors which helped and/or hindered group progress on a task. Suggest ways to improve group cooperation.

(11) Counsel a student (K-12), discussing the implications of interpersonal skills for chosen career(s) goals. Refer to examples in varied lifestyles.

(12) Identify sources of worker alienation in the K-12 classroom and describe applications of career education to improve the situation.

(13) Review literature sources to identify guidelines and skills to reduce worker alienation.

(14) Analyze the cause/effect phenomenon of worker alienation, career change, worker health, and worker productivity.

(15) Develop learning activities which focus on self-evaluation as a necessary element of career decision making.

(16) Design/implement learning activities which help pupils develop, clarify, and assimilate personally meaningful sets of work values.

(17) Design/implement values clarification exercises which reveal to students how their values influence career choice.

(18) Design/implement learning experiences whereby students at the elementary/secondary level have the opportunity to express feelings about self within a group setting, to respect the feelings expressed and to determine ways to adjust group tasks to accommodate feelings and at the same time reach group goals.

(19) Develop group career-related activities which require students (K-12) to apply problem-solving skills to a career simulated or career problem situation. Assess with students the process used and the value of interaction to solve the problem.

(20) Simulate a curriculum development experience in which the curriculum development team is to: [1] Conduct a literature search for data on career education in relation to minority, gifted and talented, disadvantaged, and handicapped students in career education; and [2] Discuss any special problems which are involved in introducing career education to disadvantaged, minority, gifted and talented, and handicapped students.

(21) Discuss the concepts of behavior modification and role play the techniques involved. Utilize behavior modification techniques for reinforcement learning.

(22) Discuss the importance of non-verbal communication in teaching and participate in activities which require observation/analysis of non-verbal behaviors of self and others.

(23) Choose a career education topic; prepare and implement a lesson plan for involvement of community resource personnel.

(24) Develop a theoretical framework illustrating the relationship(s) between career education and education in general. Describe a rationale for the theoretical framework developed.

(25) Identify the societal segments of a community. Select two or more segments for investigation and study. Determine the implications of knowledge about those segments of community, for careers, education, family, lifestyles, and culture.

(26) Discuss the advantages of being knowledgeable about the varied societal segments within a community.

(27) List several career education concepts/terms (on transparency or chalkboard) which are found in career education models. Each trainee will

write a definition for each term/concept; in small groups, trainees will compare definitions and summarize the discussion.

(28) Show transparencies of various career education models. Discuss/compare the relationships among the models.

(29) Discuss the meanings of given career education concepts and identify appropriate personnel roles to implement the career education concepts. Discuss changing career roles in society and how those roles affect the changing roles therein. Give examples of how personnel roles in universities/colleges/schools (K-12) may change, in view of the career education movement.

(30) Interview personnel in various roles in existing K-12 career education programs to determine what they view their roles to be.

(31) Write a paper on the implications of career education for the improvement of education today.

(32) Review the historical, philosophical, sociological, and psychological foundations of education. Discuss the implications of career education concepts for the foundations of education.

(33) Write a paper tracing the historical, philosphical, sociological, and psychological foundations of career education concepts.

(34) Participate in small group discussions wherein they (trainees) examine: [1] Those personal-social qualities that they are proud of (e.g., hard working, patient, dependable, unselfish, etc.), and [2] Occupations for which they feel they have appropriate personal-social skills.

(35) Discuss the varied ways in which one may cope with the authority exercised by others in work-related situations and how authority may affect one's personal goals.

(36) Discuss women's liberation, family structure, and adolescent rebellion as each relates to authority and democracy in the world of work.

(37) Participate in rap sessions in which are addressed the motives, attitudes, values, and social norms of trainees toward schooling and careers. Discuss the commonalities and differences of opinion expressed as well as the rationales for positions taken.

(38) Discuss in class the effect/influence that individual differences of opinion have on educational and career planning. Discuss alternative approaches that those working as a group may utilize in order to accomplish a task.

(39) Organize/conduct group counseling sessions to assist K-12 students in developing self-awareness in relation to exploring career alternatives.

(40) Review several sources on the concept/theory underlying child development.

(41) Discuss work as it affects one's educational, social, and economic being, and vice versa.

(42) Discuss/compare the relationship between a child's development and the world of work. Relate the developmental concepts of self/career awareness, career exploration, and career preparation to the stages/levels of a child's development.

(43) Identify/discuss an instructional unit which includes objectives for child/adolescent growth and development. Determine the career development goals which are appropriate to child/adolescent growth and development.

(44) Discuss with other trainees how their attitudes toward certain careers (pro and con) can affect K-12 students' awareness of careers, their attitudes towards certain occupations, their work values, etc.

(45) Interview a random sample of minorities to identify their views on career education and the rationale for their position(s) taken. Discuss pros and cons of career education as it relates to the needs of minorities.

(46) Review/discuss sociological, philosophical, and historical literature sources to identify and trace present and past sex role trends in the world of work.

(47) Identify resource people whose job roles have changed from what they traditionally have been. Discuss their experiences in the new role(s); compare new role experiences with those in the old role(s).

(48) Write behavioral objectives for a unit on developing career decision-making skills.

(49) Design/implement a series of learning activities which expose students (K-12) to varied lifestyles and require students to analyze and evaluate lifestyles in relation to self.

(50) Plan/implement a unit of instruction which focuses on the cultural influences which affect career choice and lifestyle.

Reading Assignments:

(1) Silberman: "Excerpts for 36 Children" pp. 258-260.

(2) Combs: "Helping Begins With Acceptance" pp. 228-230. "Developing Understanding" pp. 185-190.

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1. In revising the syllabus for Ed 311, Secondary Theroy and Practicum II the writers found especially useful the following resources and are grateful to the cooperation of the authors in the use of these materials.

Ashlock, James, Descriptive Factors of Career Education Applied to a Teacher Education Model, Education Doctoral Dissertation, Oregon State University, Corvallis, Oregon, 1974.

McKinney, Lorella, et.al., Career Education Personnel Development, The Center for Vocational Education, Ohio State University, Columbus, Ohio, 1975.

Revised Syllabus:
Ed 408, Special
Secondary Methods:
Physical Education
-- 3 credits,
Prepared by:
Maxine Thomas,
Portland State
University

Problems and methods in selecting and organizing materials for instruction; comparison and evaluation of methods, laboratory techinques, supplies, equipment; economy of time and materials. Pre-student teaching work experiences are provided in the public schools. Prerequisites: admission to program of studies in teacher education, Ed 310 and Ed 312.

General Objectives: This course provides an opportunity for students to study and analyze methods and materials in the teaching of physical education for grades K-12. Students will compare and evaluate methods, teaching styles and techniques as well as methods of organization. The pre-student teaching field experiences in the public schools assist students in developing individual skills, understandings, and attitudes which fit each one's style.

Specific Objectives:

(1) To know and demonstrate methods of teaching other than lecture--demonstration will be video-taped teaching in a mini-lesson using this method.
(2) To evaluate in writing his/her teaching relative to stated objectives and desired teaching behaviors.
(3) To be able to explain the difference between evaluation and grading, and know criteria one might use in evaluating and grading students in physical education.
(4) To know the scope of physical education in today's schools.
(5) To read from professional magazines about current trends in physical education.
(6) TO BE AWARE OF JOB ALTERNATIVES IN RELATED FIELDS OF PHYSICAL EDUCATION TRAINING.

The specific course content varies from quarter to quarter as the needs of the class enrollees vary. The common needs of the group are determined at the beginning of the quarter and serve as class topics on an individual and/or small group basis. Generally all students are video-taped teaching in a mini-lesson with opportunity for self and class evaluation of their teaching. Topics frequently included are:

(1) Various methodologies
(2) Evaluation and grading
(3) CAREER EDUCATION IN PHYSICAL EDUCATION
(4) Discipline and class control
(5) Diagnostic techniques
(6) Elective programs.

Student activities frequently included:

(1) Reading articles from professional magazines
(2) Visiting schools with elective physical education programs and advanced physical education programs
(3) Small and large group discussions
(4) Teaching mini-lessons and be video-taped
(5) Analyzing video-tape of self teaching
(6) GUEST SPEAKERS ON RELATED JOBS
(7) VISIT SCHOOLS WITH PHYSICAL EDUCATION PROGRAMS THAT HAVE INFUSED CAREER EDUCATION
(8) Evaluating curriculum materials and resources.

Course Evaluation:

(1) Observation of participation in class situation
(2) Observation of mini-lesson
(3) Cooperative and self evaluation of mini-lesson
(4) Written self-evaluation based on criteria agreed upon
(5) Written critiques of readings
(6) Mid-term and final focus questions.

Career Education Emphasis

Specific activities related to Career Education are those stated in #6 of the specific objectives, #3 in the course overview, and #6 and #7 under activities. Career Education goals are infused into each lesson from the point of view that all skills learned can be an asset in future work--paid or unpaid. Those skills include the reading and research skills that students must demonstrate as well as their interpersonal communication ability that is necessary in teaching and also in leisure, social, and future job-related activities.

Summary

This course proved to be one in which Career Education elements can be infused successfully. The students not only became aware of the place of Career Education in secondary school physical education programs, but also were aware of the alternative careers they might choose from jobs related to their physical education background.

The course could be enhanced by having available for student use a computer terminal so that material, such as the Career Information System provides, could be utilized. Also, students could more actively participate in Career Education Days sponsored by health and physical education departments of local school districts.

Bibliography

Mangum, Garth L., Career Education in the Academic Classroom, Salt Lake City, Utah: Olympus Publishing Company, 1975.

Marshall High School Health and Physical Education Department. Career Education Week. A program of events. December, 1972.

Revised Syllabus:
Ed 408, Special Secondary Methods: Science -- 3 credits
Prepared By:
Dr. Michael Fiasca, Portland State University

Problems and methods in selecting and organizing materials for instruction; comparison and evaluation of methods, laboratory techniques, supplies and equipment; economy of time and materials. Pre-student teaching work experiences are provided in the public schools. Prerequisites: admission to the program of studies in teacher education, Ed 310 and Ed 312.

General Objectives:

(1) Students will become familiar with science curriculum currently used in middle and secondary school.
(2) Students will be able to plan instruction in science for middle and secondary school science classes.
(3) Students will be able to teach one or more science lessons to a group of middle school or high school pupils.
(4) Students will be able to make initial analysis of their planning and instruction.
(5) Students will be able to plan evaluation strategies for pupils they teach.
(6) STUDENTS WILL BECOME FAMILIAR WITH ENRICHING EXPERIENCES FOR MIDDLE SCHOOL AND HIGH SCHOOL PUPILS.

Course Overview:

(1) Design instructional strategies including objectives, learning experience and evaluation strategies.
(2) STUDENT EXPERIENCE VARYING STYLES OF UTILIZING LABORATORY INSTRUCTION IN SCIENCE.
(3) Completion of a self-instructional unit in developing test questions for science.
(4) Preparation of a unit of instruction.
(5) Individual and group field trips to exemplary programs.
(6) Panels of teachers discuss current trends in the field.
(7) Each participant must devote one-half day per week in a school serving as a tutor or lab assistant.
(8) Preparation and analysis of video or audio tapes of instruction.
(9) Development of a study paper on a recent curriculum development in science education.

Course Evaluation:

(1) Student evaluation of course and instruction
(2) Instructor evaluation of assignments.
(3) Report from supervisor of school experience
(4) Instructor evaluation of class participation and level of student output.

Career Education Emphasis

Career Education was infused into the course in relationship to objective number 6, "Students will become familiar with enriching experiences for middle school and high school pupils." It gave them an opportunity to experience varying styles of utilizing laboratory instruction in science. Laboratory activities which are identical to those presently used in the community both in the private and public sectors were done by the students. Career opportunities were discussed in relation to each of these activities.

Titles of the activities suggest the work which was done. Career opportunities accompany each set of activities.

Types of Careers	Characteristic Activities
(1) MONITORING ENVIRONMENT	Dissolve Oxygen in Water One of the Effects of Thermal Pollution Field Investigation of the Clackamas River Pollution Effects on Daphnia Thermal Pollution Effects on Yeast Sewage Effects on Living Organisms Controlling Air Pollution: An Electrostatic Precipitator Lead from Roadside Dirt Smoking and Tars Noise and Blood Pressure
(2) TESTING FOODS	Testing for Sulfite Preservative in Meats Water in Your Beef Fat in Hamburger Testing Meats for Additives
(3) SOIL TESTING	Soil Test for Calcium and Phosphorous
(4) TESTING FOR DRUGS	Detection of Caffeine by Chromatography Alcohol Content of Liquid Pill Pushers
(5) MEDICAL TECHNOLOGY	Analysis of Urine for pH, Protein, Glucose, and Blood Qualitative Test for Glucose in Urine Qualitative Test for Protein in Urine Detection of Ethanol in Body Fluids Serum Cholesterol Iron in Serum Alcohol Content in Blood
(6) METALLURGY	Analysis of an Alloy for Silver, Copper and Zinc
(7) PHOTOGRAPHY	Photographic Materials and Techniques in Science Lab Film Developing and Printing Application of Photo to Motion: The Pendulum.

Summary

This proved to be an effective way to infuse Career Education into a basic subject area. An awareness of the many careers related to science was dramatically demonstrated as well as the relevancy of science to everyday life.

Bibliography

Science Applications Committee. Laboratory Activities. Portland, Oregon: Multnomah County IED and Portland State University, 1975.

Revised Syllabus:
Ed 469, Developmental Reading & Composition --3 credits,
Prepared By:
Dr. Ulrich Hardt, Portland State University

This is generally the first formal contact with teaching reading and writing many practicing and prospective teachers in secondary schools have. The course is designed to help students answer such questions as: What is reading? How will knowing about reading and writing help me in teaching my content field? What can I do in my class when some of my students cannot read what I assign them? The course content falls into the following five large areas: general background, skills and abilities, diagnosis, materials and application of the skills.

General Objectives: Ed. 469, required for a basic secondary certificate, is designed to help prepare teachers in every field to meet the responsibility for developing the reading and writing competence of their students. Training of students in reading and writing is to be done in conjunction with the teaching of content materials and through use of the content materials in the field.

Specific Objectives:

(1) Students will be able to state a personal philosophy for developmental reading and composition in secondary school. *This will include the awareness that language, reading, and writing permeate all life roles and are used for information and recreation.
(2) Students will be able to state traditional and recent definitions of reading.
(3) Students will be able to describe the role of the content teacher in secondary reading and writing programs.
(4) Students will know resources available to the classroom teacher through the school, district, and community. *This will include career development as a part of overall life development.
(5) STUDENTS WILL SELECT READING MATERIALS WHICH ENCOURAGE THEIR PUPILS TO THINK ABOUT THE IDEA OF CHOOSING A SATISFYING CAREER, TO EVALUATE THEIR OWN INTERESTS AND ABILITIES, AND TO RELATE SUBJECTS STUDIED AT SCHOOL TO FUTURE REQUIREMENTS IN THE WORLD OF WORK.
(6) Students will be able to evaluate pupils' reading and writing levels by use of formal and informal inventories and records.
(7) Students will be able to use diagnostic data in planning instruction and match materials to the instructional levels of the pupils.
(8) Students will be able to plan, carry out, and evaluate lessons which emphasize various reading skills, such as word recognition, vocabulary development, comprehension, study skills, reading rates. *This will include an awareness of general skill levels needed for career and vocational choices.

(9) Students will integrate the teaching of reading and writing skills with the teaching of listening, speaking, and viewing skills. This will include an awareness of the interdependence of these skills in all life roles--productive, consumer, citizen, family, and leisure.

(10) STUDENTS WILL DEVELOP SELF CONTAINED CAREER KITS, EACH TO INCLUDE A VARIETY OF WRITING, READING AND LEARNING EXPERIENCES RELATED TO A SPECIFIC OCCUPATION, CLUSTER OF OCCUPATIONS, OR AVOCATION. These include reinforcements for the various skills which are the concern in this course, such as: word-attack skills, word-meaning skills, visual perception, following directions, reading graphic materials, using reference materials, determining main ideas, selecting relevant details, organizing ideas, and drawing inferences.

Course Overview - Topics will include:

(1) The communication process
(2) Various methods and materials for teaching reading and writing
(3) The role of the content teacher in the school-wide programs
(4) Teacher attitudes toward reading and writing instruction
(5) Reading comprehension in the content areas
(6) Readability of reading materials
(7) CAREER EDUCATION IN REGARD TO READING AND WRITING IN SECONDARY SCHOOLS.

Course Evaluation: The instructor has many opportunities to assess student progress through student's class participation, quality of written work, and oral presentations to the class. Any field experiences, tutoring assignments, projects (including those infusing Career Education into reading and writing) will be carefully designed for training of classroom teachers.

Career Education Emphasis: Ed. 469 was almost the ideal class for Career Education infusion. All prospective secondary school teachers, regardless of subject area, must take this course as a requirement for the basic teaching certificate, because the public schools, the Teacher Standards and Practices Commission, the State Department of Education, and the School of Education of Portland State are all emphasizing the extreme importance of improving the skills for teaching of reading of all subject-matter teachers. This is a recognition that all communication skills learned are an asset and directly related to the life roles.

Therefore Career Education was infused into the course at many points. In particular, objectives 5 and 10 dealt with preparing prospective teachers directly for helping their pupils with information for career decision making. The primary focus was on the role of the classroom teacher (as separate from counseling and guidance, or placement and follow-up) because of the belief that team efforts can make Career Education a goal for the total school program, all teachers making a contribution through whatever subjects they teach, just as they all contribute to the teaching of reading and writing in all content areas.

Summary

This proved to be an effective course in which to infuse Career Education. Students became conscious of all career opportunities mentioned in curriculum materials used in the classroom; they became aware of how the various subject areas are important to any person in any field, and they had an illustration of how the communication skills are the key to life success.

Bibliography

1. Drier, Harry, Jr., et al. K-12 Guide for Integrating Career Development into Local Curriculum. Worthington, Ohio: Charles Jones Publishing Co. 1972.

2. Educational Testing Service. Proceedings of the Conferences on Career Education. Princeton, New Jersey: Princeton University Press. 1972.

3. Hoyt, Kenneth B., et al. Career Education: What It Is and How To Do It. Second edition. Salt Lake City: Olympus Publishing Co. 1974.

4. Nielsen, Duane M. and Hjelm, Howard F., Eds. Reading and Career Education. Newark: International Reading Association. 1975.

Revised Syllabus: Ed 548, Advanced Secondary Methods: Science Advanced Methods -- Special Subject Fields in the Secondary School -- 3 credits,
Prepared by:
Dr. Michael Fiasca, Portland State University

Concentrated study of recent trends and recurring problems of selecting, organizing, and presenting concepts, information and materials of instruction in a subject taught in the secondary school. Prerequisite: Graduate standing in teacher education and/or a minor or major teaching area in one of the sciences.

General Objectives:

(1) Students will be able to analyze and discuss the objectives, philosophy, teaching style and evaluation strategies of one newer approach to teaching science.
(2) Students will be able to utilize a computer terminal and evaluate computer simulations for their classroom use.
(3) Students will be able to analyze evaluation strategies and design their own evaluation instruments.
(4) Students will be able to prepare instructional materials which they will use in their science instruction.
(5) Students will be able to analyze and design facilities for teaching science.
(6) Students will be able to analyze newer methods of science instruction and adapt them to their own classrooms.

Course Overview:

(1) Preparation of discussion papers.
(2) Hands-on experience in a computer terminal.
(3) Review of evaluating methods. Students prepare evaluation instruments.
(4) Students prepare a project, e.g.: design a lab facility; prepare a laboratory exercise; prepare a video-tape or film loop; prepare a set of 35mm slides; prepare a computer program to be used in instruction and others.
(5) Video-tapes are made of instruction which are viewed in class and analyzed.
(6) Visitations to exemplary programs are made, instructional films are viewed, speakers are brought in to discuss issues at hand.

Course Evaluation:

(1) Student evaluations
(2) Follow-up discussions with course participant
(3) Instruction evaluation of class projects, class participation and assignment.

Career Education Emphasis

The students had many alternatives to choose from so regardless of their varied backgrounds there was opportunity for additional learning experiences. Laboratory activities which are identical to those presently used in the community both in the private and public sectors were done by students. Career opportunities were discussed in relation to each of these activities.

Titles of the activities suggest the work which was done. Career opportunities accompany each set of activities.

Types of Careers	Characteristic Activities
(1) MONITORING ENVIRONMENT	Dissolve Oxygen in Water One of the Effects of Thermal Pollution Field Investigation of the Clackamas River Pollution Effects on Daphnia Thermal Pollution Effects on Yeast Sewage Effects on Living Organisms Controlling Air Pollution: An Electrostatic Precipitator Lead from Roadside Dirt Smoking and Tars Noise and Blood Pressure
(2) TESTING FOODS	Testing for Sulfite Preservative Use in Meats Water in Your Beef Fat in Hamburger Testing Meats for Additives
(3) SOIL TESTING	Soil Test for Calcium and Phosphorous
(4) TESTING FOR DRUGS	Detection of Caffeine by Chromatography Alcohol Content of Liquid Pill Pushers
(5) MEDICAL TECHNOLOGY	Analysis of Urine for pH, Protein, Glucose and Blood Qualitative Test for Protein in Urine Qualitative Test for Glucose in Urine Detection of Ethanol in Body Fluids Serum Cholesterol Iron in Serum Alcohol Content of Blood
(6) METALLURGY	Analysis of an Alloy for Silver, Copper and Zinc
(7) PHOTOGRAPHY	Photographic Materials and Techniques in Science Lab Film Developing and Printing Application of Photo to Motion: The Pendulum.

Summary

The graduate students were very much aware of the need for Career Education to be related to the science area. This approach proved to be successful in that the students not only became familiar with content but were also involved in the process of infusion.

Bibliography

Science Applications Committee. Laboratory Activities. Portland, Oregon: Multnomah County IED and Portland State University, 1975.

Revised Syllabus:
Ed 548, Advanced Methods: Social Science, Special Subject Fields in the Secondary School
--3 credits
Prepared By:
Dr. Ralph Smith,
Portland State University

Concentrated study of recent trends and recurring problems of selecting, organizing, evaluating, and presenting concepts, information and materials of instruction in a subject taught in secondary school.

Course Objectives:

(1) To consider a philosophical foundation for the social sciences and the social studies.
(2) To develop a theoretical framework with the widest possible applications for the social studies at various grade levels.
(3) To relate theory to practice through illustrations from various social studies at various grade levels.
(4) To analyze in detail modern teaching procedures such as reflective thinking, discovery, the inductive approach, or combinations of these.
(5) To become familiar with present curriculum trends in social-studies education.
(6) To become familiar with the literature of the social studies.

Course Evaluation

Written examinations of the essay type. Questions designed to promote reflective thinking and ability to find meanings and see relationships. Report on readings is part of the final examination. Students also mark a checklist of the above objectives indicating the extent to which they seem to have been achieved.

Career Education Emphasis

Objectives:

(1) To relate recent trends and new developments in Career Education to the theory and practice of teaching social studies.
(2) To exchange information on what teachers in the class are or are not doing in the field of Career Education.
(3) To draw conclusions about the place and function of Career Education in the social studies curriculum.
(4) To become aware of the body of knowledge constituting Career Education.

Procedures: Background for the study consists of two handouts: one from a recent news source such as TIME magazine showing the current and projected status of the employment market, and the Secondary Education Task Force abstract for the other handout. These are distributed a week ahead of discussion. Class is divided into two or three groups with each group chaired by a teacher who is involved in Career Education. Focus of the discussion is recent trends and new developments in Career Education at the junior and senior high school levels. When class reconvenes, feedback is obtained from each group, definitions are noted, and questions raised. The study is concluded by relating questions raised to the theory of teaching in the text and to sources of information about Career Education.

Topics:

(1) The cognitive dissonance between the work ethic and the leisure ethic.
(2) Historical context for the "state" to support economic education as well as citizenship education.
(3) Labor and management agree upon the necessity for tax-supported education although for different reasons.
(4) Vocational education as the forerunner of Career Education.
(5) Career Education in the classroom: social studies, English, et al.
(6) Career Education at Madison High School.
(7) Career Education at Tigard High School--CE 2.
(8) Career Education as a school-graduation requirement in Oregon.
(9) Career Education as a separate study.
(10) Career Education integrated into other subject areas.
(11) Advantages and disadvantages of the separate approach.
(12) Advantages and disadvantages of the integrated approach.
(13) Importance of definitions and semantics.
(14) Career Awareness, Career Exploration, Decision-making.
(15) "Preparation" and "Specialization" supplement decision-making.
(16) Relationship of Career Education to vocational education, industrial arts, and industrial education.
(17) Conclusions and recommendations for infusing Career Education into social-science education.

Summary

The effectiveness of infusion of Career Education into this course is reflected in the following student responses to the question "How should you proceed to develop a topic in Career Education using an inductive approach?"

Example: Working for a public agency vs. a private agency
Grade Level: High School seniors

This is a good topic to use to get the class to build generalizations about this controversy. It is even more interesting because it can lead to many smaller generalizations which can be put together into a generalized statement. Assuming that the students have done some research in books such as The Dictionary of Occupational Titles (DOT) or have used the C.I.S. computer to explore various agencies. (For example, a student interested in social work may explore the possibilities in that area, etc.)

(1) Ask the students to brainstorm about their understandings about private agencies, then public agencies; make a list of advantages and disadvantages of each type on the board. Be sure in the directions that they know at the very first that we are going to compare and evaluate. (This could be done before any exploration work was done.)

(2) When a list is constructed of the advantages and disadvantages of private and public agencies (pay scales, conditions, fringes, laws, size, requirements, tenure, etc.) by all the students, the students will be able to pick out generalizations that hold true in many occupations (assuming that various occupations were being considered in their exploration.)

(3) Construct one large generalization (a combination of generalizations, probably) that holds true in enough instances to be acceptable to the group. In my experience, students with diverse interests seem to build their generalizations according to their own narrow vision or set of likes and dislikes. By asking the students to all contribute what they know to a common pool of knowledge (brainstorming), they can build more educated generalizations. In a situation like this, the teacher must resist the temptation to impose his/her feelings about generalizations until the evaluation period of the exercise (testing the generalization.)

If the students reach a generalization in the end, that qualifies it as inductive according to Hunt & Metcalf. (a) The teacher knows the generalization. (b) The teacher gives the students the problem or topic. (c) The students provide information (pieces of the puzzle). (d) The students construct the generalization. (e) An evaluation is made.

Possibly it is better titled "Problem Solving, Inductive Approach." The problem is: Which type of agency is best to work for? The inductive approach would be used in Career Education as in any of the social studies areas. Inductive discussions depend on input from the students. Many have no experience in careers or a job. Resources on careers are sadly insufficient on the high school level. Books tend to be elementary. Working by Studs Turkel is one I use in class to give kids a taste of the real world of work.

As an example, if one were to develop a topic of careers in the Social Service field for juniors and seniors, one might start by having them list all careers which they saw as Social Service careers. Then try to determine what those jobs had in common. This might involve having resource people come in from outside to answer questions about what they do, how they trained, what are the rewards, and other considerations of their jobs. Using this list of common attributes about the jobs, one might have a discussion of how to go about training for the general area of Social Services. At each step have the students ask themselves--"Am I still interested in this area? What are the advantages over other areas I have knowledge of? Are the rewards worth the costs?" Next have the students focus on a narrow goal, a particular career he/she might be interested in. Have them prepare a program that would look at the same issues discussed in general above. Finally, try to get the students in a position where they could have some experience in their particular field and again analyze their degree of interest.

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Appendices

APPENDIX I

Suggested Format and Criteria for Identifying, Describing and Classifying Career Education Elements Existing in Current Class Offerings

I. General Description of Course:

A. Number _____

B. Title _____

C. Credits _____ Graduate _____ Undergraduate _____

D. Usual Instructor(s) _____

E. Is this a required course? Yes ___ No ____
If you checked "Yes", for whom? _____

F. Which Term(s) is this course offered? Fall ___ Winter ___ Spring ___

G. Specific Purpose and Catalog Description: _____

_____

_____

_____

_____

_____

_____

H. How extensive is the Career Education content of this course?

check one: 1. Very Extensive _____

2. Quite a bit _____

3. A little _____

4. Very little _____

5. Don't know _____

If you checked "Very little" or "Don't know", you may find it desirable to proceed to III.

II. List and briefly describe each element or unit of content (already existing within this course) which is judged (by the undersigned reviewer) to constitute an element, facet or dimension of Career Education. Do this by completing and attaching hereafter the following description and checklist (use one page for each element or unit of Career Education which you are able to identify as existing within the course under review): complete one of the following page for <u>each</u> Career Education unit or element identified in this course:

A. Briefly describe in your own words the nature of the Career Education element: _____

_____

B. Is this a discrete (separate) element of instruction within the course or it is blended with or incidentaal to other elements?

Check one: Discrete_____ Blended _____

C. In terms of clock hours of class time, what is the approximate size of this Career Education element or unit: Clock hours: ____

D. To which of the following Life Roles would you classify the Career Education content of this course?

Check One: 1. Leisure _____

2. Family _____

3. Citizen _____

4. Producer _____

5. Other (describe) _____

III. In your judgemnt, should Career Education content (philosophy, concepts, methods, practice) be added to this course?

Check one: 1. Yes _____

2. No _____

3. No Opinion _____

IV. If you checked "Yes" under item III (above), describe the Career Education content which might appropriately be added and what other content should be eliminated to make room for it:

V. Comments, Suggestions and/or Recommendations:

APPENDIX II

Policy Resolutions (1)

Career Education

WHEREAS, the concept of Career Education continues to impact upon the public school systems of the Nation; and
WHEREAS, the AVA has been supportive of the developing concepts embodied in Career Education; and
WHEREAS, vocational education has assumed a major leadership role to further the development of Career Education; and
WHEREAS, organization structure of the U. S. Office of Education has indicated that the Office of Career Education will be responsible directly to the U. S. Commissioner of Education; and
WHEREAS, there is a need to reassess the role of vocational education in Career Education; and
WHEREAS, the future of the concept of Career Education depends upon the involvement of all education community as well as business, industry, labor and the public at large; and
WHEREAS, there continues to be a misunderstanding of Career Education, vocational education and their relationship.

THEREFORE, BE IT RESOLVED, that the AVA support the position that Career Education is a concept of education whereby academic and vocational experiences in both school and community enable individuals to make choices leading to success in lifelong developmental patterns of learning and working which constitutes a career. This concept also provides for development of self-awareness and career awareness; familiarity with a work oriented society; explorations of options; and the selection of one or more alternatives to achieve the individual's career objectives; and

BE IT FURTHER RESOLVED, that AVA promote the fact that vocational education is a component of Career Education; and

BE IT FURTHER RESOLVED, that the AVA urge all national organizations and associations interested in and involved with education programs to exhibit leadership and support for Career Education.

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(1) American Vocational Association's Member-Gram, Volume VII, Number 1, Fall 1975.

APPENDIX III
Career Potentials for Geography Majors (1)

As a part of a survey(1) initiated by the Task Force, a very complete response was received from the PSU Department of Geography and it could well serve as a prototype for many disciplines to examine career potentials and analyze course offerings in relation to them. For this reason, the entire reply from Geography is included here.

1. "The largest proportion of geography graduates are employed by public agencies and consulting firms in the areas of research and planning. Some of the major subfields of employment include:

   Land Use and Comprehensive Planning - A large proportion of planners hold degrees in geography. Examples of local employers include: CRAG, Multnomah County, ...

   Environmental and Resource Planning - Many positions have appeared in these areas in recent years, partly due to the requirement for environmental impact statements. Bonneville Power Administration is a major local employer in this area.

   Services Planning - In Portland, a number of geographers work in transportation research and planning at the Port of Portland.

2. A second major career potential area is in cartography and mapping. Employers in this include private mapping businesses, consulting firms, publishing businesses, and public agencies. The public employers range from planning agencies where cartography and planning are blended, to large and specialized state and federal map producing agencies.

3. Some other types of employers who seek geographers include:

   Defense - Many civilian and military intelligence specialists are geographers.

   Marketing research firms - Many persons carrying out store (and other activity) location studies are geographers.

4. We are presently proposing a substantial revision of our undergraduate curriculum, in part to give more sharply defined preparation to our students who are aiming at the types of careers identified above....."

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(1) January 19, 1976 Memorandum to Ralph A. Smith, School of Education, from Richard Lycan, Head, Geography Department (PSU)

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